



IMARS *HIGHLIGHTS*

**Research Commentaries for the Members of
The International Maillard Reaction Society**

A Non-profit Research and Education Organization in Biomedicine and Food Science

**Volume 16
Number 2
March 26, 2021**

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IMARS

Established in 2005, the International Maillard Reaction Society gathers researchers and clinicians involved in the field of carbonyl reactions in foods, biology and medicine. It promotes research on Maillard Reaction and protein glycation and their numerous applications. It also organizes regular international congresses on the same theme, in addition to those that have been taken place since 1979.

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Volume16, Number 2, March 26, 2021

CONTENTS OF THIS ISSUE:

- Editorial comment 4
Reiko Inagi

- Introducing Jarape 5
Paul J Thornalley

- Glycation Cartoon 6
Jarape

- Comparison of the utility of MS/MS diagnostic ions generated under positive and negative ionization modes for the discrimination between Schiff bases and Amadori products 7
Haoran Xing, Varoujan Yaylayan

- Intracellular accumulation of advanced glycation end products induces osteoblast apoptosis via endoplasmic reticulum stress 18
Ryusuke Suzuki, Yukio Fujiwara, Mitsuru Saito, Shoutaro Arakawa, Ryoji Nagai

- Highlights of the glycation literature 20
(Jan. 2021- Mar. 2021)

Editorial comments

For the beginning of the May issue, **Prof. Paul J Thornalley**, a president of IMARS, sent us the interesting cartoons by **Jarape**, who is a cartoonist interested in glycation. This cartoon introduces concept of glycation interestingly. Please enjoy his colorful cartoons.

In this issue, I am delighted to publish the article from a former president of IMARS, **Prof. Varoujan Yaylayan** at Department of Food Science and Agricultural Chemistry, McGill University, Quebec, Canada, titled “Comparison of the utility of MS/MS diagnostic ions generated under positive and negative ionization modes for the discrimination between Schiff bases and Amadori products.” Prof. Yaylayan’s group demonstrates that diagnostic ions obtained from MS/MS fragmentations can be used for the discrimination between glucose-derived Schiff bases and their corresponding Amadori compounds.

I am also delighted to publish the article from a committee member of the Japanese Maillard Reaction Society (JMARS), **Prof. Ryoji Nagai** at Graduate School of Agriculture, Tokai University, Kumamoto, Japan. Dr. Ryusuke Suzuki of his group demonstrates that intracellular advanced glycation endproducts (AGE)-induced endoplasmic reticulum stress is one of the mechanisms underlying osteoblast apoptosis. They highlight novel insight into the molecular mechanisms of osteoblast apoptosis and AGE-related osteoporosis. Dr. Ryusuke Suzuki received the YIA award in the 30th JMARS virtual meeting on Nov 6, 2020.

The IMARS Highlights editors always look forward to submitting your articles related to glycation research in the field of food and medical sciences, and any comment to the articles published in IMARS Highlights.

Please stay safe and healthy.

Reiko Inagi, PhD

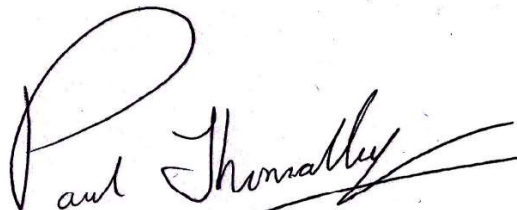
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Introducing Jarape – a cartoonist with an interest in glycation

I am very happy to introduce the first installment of cartoons by Jarape – a cartoonist with an interest in glycation. Jarape is the penname of a chemist and cartoonist from Columbia, South America. Now retired, he worked for 28 years as a forensic chemist at the Trace Evidence Group, Instituto Nacional de Medicina Legal y Ciencias Forenses, Colombia. He was trained at the Metro Dade Police Department, International Forensic Research Institute (IFRI), Florida International University, Miami, Florida, USA. As a cartoonist, he has been a collaborator with different newspapers and journals in Columbia - publishing regularly for more than 12 years in the newspaper El Espectador, Bogotá. Some of his cartoons have been published in journals in Canada, USA, India, Bolivia and Colombia.

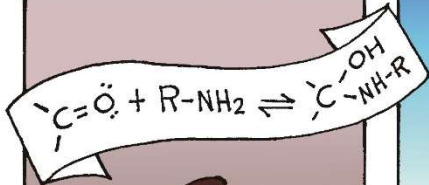
Jarape sent his glycation-themed cartoons to me earlier this year. They provide an original, fascinating and light-hearted introduction to glycation. I hope you enjoy them and brighten the day for you. Many thanks to Jarape for this colorful contribution to IMARS Highlights.

Kind regards,

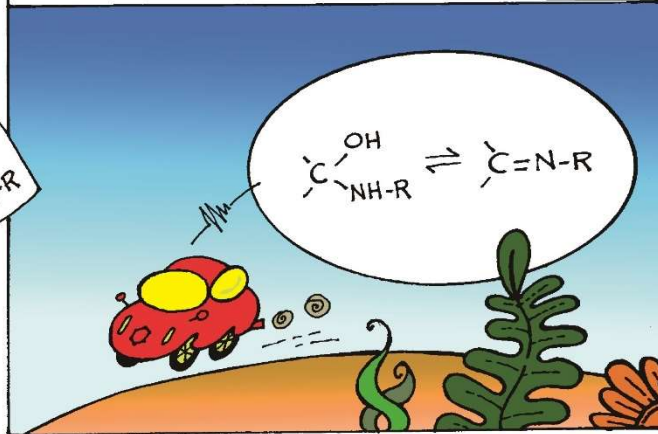


Paul J Thornalley
President, IMARS and Director, Diabetes Research Center,
Qatar Biomedical Research Institute (QBRI), Hamad Bin Khalifa University,
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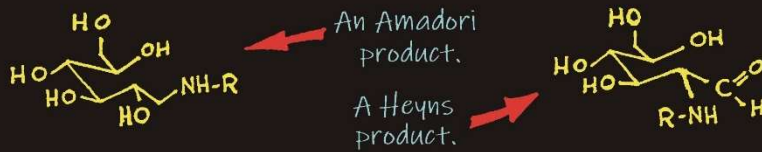
Let's recall that Maillard reactions take place when a protein, a lipid or an amino acid reacts with a reducing sugar.



The products of these reactions are known as Schiff bases.



These bases are not very stable so they rearrange part of their molecules to become what is referred to as Amadori or Heyns products depending on what the initial reducing sugar was.

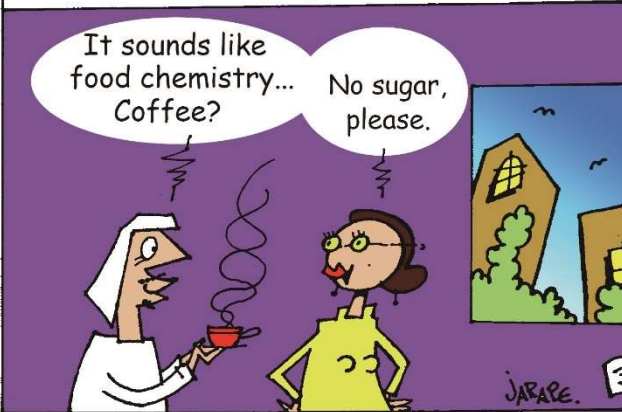


The reactions don't stop here. They proceed until Strecker products are obtained. These compounds in turn end up converted into melanoidins.



Since these glycation reactions take place without the aid of enzymes they are also called:

Non-Enzymatic Glycation reactions.



Comparison of the utility of MS/MS diagnostic ions generated under positive and negative ionization modes for the discrimination between Schiff bases and Amadori products

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Abstract

Schiff bases and Amadori rearrangement products are the most important isomeric intermediates involved in the early Maillard reaction; distinguishing them by various analytical techniques remains a difficult challenge. Here we demonstrate that diagnostic ions obtained from MS/MS fragmentations can be used for the discrimination between glucose derived Schiff bases and their corresponding Amadori compounds taking as an example glycine and proline based intermediates. The ESI-qTOF-MS/MS systems were operated under both positive and negative modes to obtain three types of molecular ions: protonated, sodiated, and deprotonated. Each of the three molecular ions was subsequently fragmented at three different collision-induced disassociation energies (10, 15, and 20 eV) to generate unique MS/MS fragmentation patterns for each analyte. Analysis of the MS/MS data has indicated that protonated and deprotonated molecular ions generated unique diagnostic ions able to discriminate between Schiff bases and their corresponding Amadori compounds. Whereas sodiated ions generated identical diagnostic ions vastly differing in their relative intensities. Furthermore, it was demonstrated that relative intensities of the diagnostic ions originating from Amadori and Schiff bases can be used to predict their ratio in the analytical sample.

Keywords: Diagnostic ions, tandem mass spectrometry (MS/MS), collision-induced disassociation (CID), Maillard reaction, Schiff bases, Amadori compounds.

1. Introduction

Maillard reaction produces a wide array of compounds, some isomeric in nature, others with divergent chemical properties with a dynamic concentration range. The development of efficient analytical methodologies to distinguish between different Maillard Reaction Products (MRPs) with various isomeric structures, therefore, remains a formidable challenge. The high-resolution mass spectrometry (HRMS) is emerging as a high-throughput analytic platform to perform non-targeted analysis of the Maillard reaction mixtures. [1, 2] The HRMS has the capacity to separate thousands of compounds based on differences in their molecular weights in a single run. Additional separation power can be achieved using liquid chromatography in conjunction with MS analysis. The HRMS also allows the assignment of elemental composition at a considerable accuracy. Furthermore, unequivocal structural elucidation can be achieved during subsequent tandem mass spectrometry (MS/MS) through collision-induced disassociation (CID). However, there is limited information that can be found in the literature on the utilization of MS/MS fragmentations for the purpose of distinguishing isomeric intermediates from the Maillard reaction. [3-6] Knowledge of the presence and relative amounts of isomers in these reaction mixtures can be a useful strategy for estimating their relative importance. The ability to discriminate between initially formed isomeric intermediates in the Maillard reaction mixtures can provide for the workers in the field of “omics” an important tool for more in-depth analysis of such reactions. To this end, we recently investigated the utility of MS/MS diagnostic ions in distinguishing the two most important known isomeric structures formed in the initial stage of the Maillard reaction (Schiff bases and Amadori rearrangement products) under different MS/MS fragmentation conditions. [7, 8]

2. Material and Methods

2.1 Materials

All reagents and chemicals were purchased from Sigma-Aldrich Chemical Co. (Oakville, ON, Canada) and used without further purification. Synthesis and characterization of *N*-carboxymethyl-D-glucosylamine (glycine Schiff base), 1-carboxymethylamino-1-deoxy-D-fructose (glycine Amadori compound), *N*-[(2'-carboxy)pyrrolidinyl]-D-glucosylamine (proline Schiff base), and 1-[(2'-carboxy)pyrrolidinyl]-1-deoxy-D-fructose (proline Amadori compound) were performed according to published procedures. [7-10]

2.2 LC-ESI-qToF/MS/MS

Samples were analyzed using an Agilent 1290 Infinity II LC system coupled to the 6545 qToF-MS (Agilent Technologies, Santa Clara, USA). The LC separation was conducted on a Poreshell120 EC-C18 analytical column (Agilent Technologies; 2.7 μm \times 3 mm \times 100 mm) connected with a Poreshell120 EC-C18 guard column (Agilent Technologies; 2.7 μm \times 3 mm \times 5 mm). The elution condition was at a flow rate of 0.4 mL/min with the mobile phase as the mixture of 0.1% (V/V) aqueous formic acid (40%) with methanol (60%). The injection volume was 1 μL , and the column temperature was set to 20 $^{\circ}\text{C}$. The samples were analyzed in positive and negative electrospray ionization modes using product ion (MS/MS) experiment. The drying gas temperature was at 275 $^{\circ}\text{C}$ with a flow of 10 mL/min, the sheath gas temperature was at 300 $^{\circ}\text{C}$ with a flow of 12 mL/min, the pressure on the nebulizer at 45 psi, the capillary voltage at 4500 V, the fragmentor voltage at 1000 V, the skimmer voltage at 50 V, and the nozzle voltage at 2000 V. The Tandem mass spectrometry (MS/MS) data was collected by scans between m/z 50 and 1000 at a scan rate of 3 spectra/s for three different collision energies (10 V, 15 V, and 20 V). The data sets were processed with MassHunter Profinder B.08.00 software (Agilent Technologies).

2.3 Direct injection-qToF-ESI/MS/MS

The diluted sample solutions (1 μL) in methanol/ water (90%/ 10%) were supplied to the source directly via a syringe. The analysis was performed on a Bruker Maxis Impact quadrupole time of flight mass spectrometer (Bruker Daltonics, Bremen, Germany) operated in positive and negative ion modes. Instrument calibration was performed using sodium formate clusters. The electrospray interphase settings were as follows: nebulizer pressure, 0.6 bar; drying gas, 4

L/min; temperature, 180 °C; and capillary voltage, 4500 V. The scan range was from m/z 50 to 800. Tandem mass spectrometry (MS/MS) was carried out in MRM mode using 10.0 eV collision energy. The data were analyzed using Bruker Compass Data Analysis software, version 4.2.

3. Results and discussion

3.1 Diagnostic ions generated from MS/MS fragmentations of synthetic glycine and proline ARPs and their Schiff bases

The MS/MS data of synthetic standard compounds including glycine Schiff base, glycine ARP, proline Schiff base, and proline ARP, were obtained from the fragmentation of protonated, sodiated, and deprotonated molecular ions obtained from ESI positive and negative modes using different CID energies (i.e., 10eV, 15eV, and 20eV). To evaluate the reproducibility of the diagnostic ions produced, two independent MS systems were chosen: (1) Bruker Maxis Impact direct injection (DI) quadrupole time of flight (qToF) mass spectrometer, and (2) Agilent 1290 Infinity II LC system (reverse phase column) coupled to a 6545 qToF mass spectrometer. Both systems were operated in electrospray ionization (ESI) mode. [7, 8]

3.1.1 LC-MS versus DI-MS

It was observed that the diagnostic ions generated through MS/MS fragmentations were reproducible under both MS systems with some differences observed in the abundances of certain ions. For example, the LC-MS system generated more protonated ions, while the DI-MS system generated more sodiated ions. In addition, the Schiff bases were less stable under the LC-MS system compared to the DI-MS system. (Table 1) [7, 8]

3.1.2 ESI positive ($[M+H]^+$ and $[M+Na]^+$) versus ESI negative ($[M-H]^-$)

Protonated, sodiated, and deprotonated ions were evaluated with respect to their suitability for producing diagnostic ions. [7, 8] The results are summarized in Figure 1. It was observed that protonated and deprotonated molecular ions generated unique diagnostic ions able to discriminate between Schiff bases and their corresponding Amadori compounds. Whereas sodiated ions generated identical diagnostic ions, vastly differing, however, in their relative intensities. Both protonated and deprotonated Schiff bases produced the diagnostic ions at $[AA+diose]$ through C2-C3 retro-aldolization (m/z 118, 158, 116, and 156) as shown in Figure

1 **pathway a.** The protonated ARP produced the diagnostic ions at $[AA+CH_2+H]^+$ through α -fission (m/z 88 and 128) undergoing **pathway c**, while the deprotonated ARP produced the diagnostic ion at $[AA+triose-H]^-$ through C3-C4 retro-aldolization (m/z 146 and 186); Figure 1 **pathway d.** An additional diagnostic ion originating from deprotonated Schiff bases was the 2-azaallyl anion at $[M-COOH-H]^-$ (m/z 192) formed through **pathway b**. However, this diagnostic ion is amino acid-dependent and was not observed in the proline Schiff base but was present in phenylalanine, isoleucine, histidine, and arginine Schiff base MS/MS spectra. [8] On the other hand, the sodiated molecular ions failed to generate unique fragment ions that could be considered diagnostic for either Schiff base or ARP. (Figure 1) Both isomers produced two dominant identical fragments at $[AA+diose+Na]^+$ (m/z 140 and 180) and $[tetrose+Na]^+$ (m/z 143) through C2-C3 retro-aldolization (**pathway a and e**), at differing intensities (see section 3.2.3).

3.1.3 CID energy (10eV, 15eV, and 20eV)

The influence of CID energy on the generation of MS/MS diagnostic ions was also investigated at 10eV, 15eV, and 20eV energy levels for the protonated and sodiated ions obtained from the LC-MS system. (Figure 2) It was observed that the Schiff bases were not stable at higher energy values, and were decomposing before reaching the detector. For example, the protonated glycine Schiff base did not generate any meaningful fragments at 20eV. [7, 8] (Figure 2-a) Furthermore, an increase in CID energy generally induces a reduction in the relative intensities of the precursor ions. (Figure 2, red line) However, unlike the ARPs, the relative intensities of the diagnostic ions of Schiff bases did not increase with the corresponding decrease in the intensity of their precursor ions, (Figure 2, green, blue, and yellow line) indicating that higher CID energy values are not suitable to study MS/MS fragmentations of Schiff bases. Finally, it was observed that the sodiated ions (m/z 260 and 300) had extra stability during MS/MS fragmentations compared to the protonated ions (m/z 238 and 278). (Figure 2) Therefore, the instability of the Schiff bases can also be illustrated by comparing the relative intensities of their precursor ions under various CID energy values to that of ARPs. (Figure 2, m/z 260 and 300) To obtain useful diagnostic ions from Schiff bases, it is recommended that MS/MS fragmentations be carried out under lower CID energy values.

3.2 The utility of MS/MS diagnostic ions in estimating the ratio of Schiff bases and ARPs in prepared mixtures of synthetic standards

Prepared mixtures of synthetic glycine Schiff base and its ARP with known molar ratios of 1:0, 1:2, 2:1, and 0:1 were analyzed by HRMS to evaluate the potential of utilizing relative intensities of diagnostic ions generated from MS/MS in estimating the composition of the isomeric mixtures. The three molecular ions, deprotonated ion at (m/z 236), protonated ion at (m/z 238), and sodiated ion at (m/z 260) were fragmented at 10eV (the protonated and sodiated ions were also fragmented at 15eV and 20eV). The recorded relative intensities of the diagnostic ions shown in Figure 1 were plotted against the composition of the mixtures and discussed below. (Figure 3)

3.2.1 The deprotonated ion $[M-H]^-$

Compared to the protonated and sodiated ion, the deprotonated ion was found to be the best choice for estimating the composition of a mixture of Schiff bases and their ARPs for several reasons: **(1)** the MS/MS spectra were less noisy due to the selectivity towards oxygen-containing compounds under ESI negative mode, additionally, the various dehydration reactions were also minimized; [7, 8] **(2)** the intensities of the diagnostic ions were relatively high for both isomers; (Figure 3-a) and **(3)** the relative intensities of the diagnostic ions responded well to the known ratio of Schiff base to ARP at lower CID energy values (10 eV). [7, 8] (Figure 3-a)

3.2.2 The protonated ion $[M+H]^+$

Despite the fact that protonated molecular ions can generate diagnostic ions for distinguishing the Schiff bases from their corresponding ARPs, these ions cannot be used reliably for the purpose of estimating the composition of a mixture. Although at higher CID energy values (20eV), the relative intensity of the diagnostic ion for the ARP (m/z 88) responded well to its increasing concentration in the mixture (Figure 3-b-3), the diagnostic ion for the protonated glycine Schiff base (m/z 118) completely disappeared. [7, 8] (Figure 2-a) On the other hand, at lower CID energy values (10eV), the relative intensity of the diagnostic ion for ARP (m/z 88) was less responsive to the concentration changes. (Figure 3-b-1)

3.2.3 The sodiated ion $[M+Na]^+$

Although the sodiated ion did not produce unique diagnostic ions for distinguishing between Schiff bases and ARPs, however, the relative intensities of the common diagnostic ions at m/z 140 and 143 (Figure 1) responded well to the mixture of isomers due to the fact that Schiff

bases are less stable than ARP, hence higher relative intensities of the daughter ions were observed in the mixtures rich in Schiff bases. A similar trend was also observed when the mixture was fragmented at different CID energies (15eV and 20eV). (Figure 3-c)

Acknowledgments

The authors acknowledge funding for this research from Natural Sciences and Engineering Research Council of Canada (NSERC), Le Fonds de Recherche du Québec – Nature et Technologie (FRQNT), McGill University and from China Scholarship Council (CSC).

References

1. Golon, A., et al., *An investigation of the complexity of Maillard reaction product profiles from the thermal reaction of amino acids with sucrose using high resolution mass spectrometry*. *Foods*, 2014. **3**(3): p. 461-475.
2. Hemmler, D., et al., *Evolution of complex maillard chemical reactions, resolved in time*. *Scientific reports*, 2017. **7**(1): p. 1-6.
3. Hau, J., S. Devaud, and I. Blank, *Detection of Amadori compounds by capillary electrophoresis coupled to tandem mass spectrometry*. *Electrophoresis*, 2004. **25**(13): p. 2077-2083.
4. Davidek, T., et al., *Analysis of Amadori compounds by high-performance cation exchange chromatography coupled to tandem mass spectrometry*. *Analytical chemistry*, 2005. **77**(1): p. 140-147.
5. Yuan, H., et al., *The Comparison of the Contents of Sugar, Amadori, and Heyns Compounds in Fresh and Black Garlic*. *Journal of Food Science*, 2016. **81**(7): p. C1662-C1668.
6. Yuan, H., et al., *The Simultaneous Analysis of Amadori and Heyns Compounds in Dried Fruits by High Performance Liquid Chromatography Tandem Mass Spectrometry*. *Food Analytical Methods*, 2017. **10**(4): p. 1097-1105.
7. Xing, H., V.V. Mossine, and V. Yaylayan, *Diagnostic MS/MS fragmentation patterns for the discrimination between Schiff bases and their Amadori or Heyns rearrangement products*. *Carbohydrate Research*, 2020. **491**: p. 107985.
8. Xing, H. and V. Yaylayan, *Mechanochemical generation of Schiff bases and Amadori products and utilization of diagnostic MS/MS fragmentation patterns in negative ionization mode for their analysis*. *Carbohydrate Research*, 2020. **495**: p. 108091.
9. Mossine, V.V., G.V. Glinsky, and M.S. Feather, *The preparation and characterization of some Amadori compounds (1-amino-1-deoxy-d-fructose derivatives) derived from a series of aliphatic ω -amino acids*. *Carbohydrate Research*, 1994. **262**(2): p. 257-270.
10. Mossine, V.V., et al., *Crystal structure of an Amadori compound, N-(1-deoxy- β -d-fructopyranos-1-yl)-glycine ("d-fructose-glycine")*. *Carbohydrate research*, 1995. **266**(1): p. 5-14.

Table 1: Comparison of the suitability of generating MS/MS diagnostic ions under different ionization modes using different MS systems.

	$[M+H]^+$	$[M+Na]^+$	$[M-H]^-$
Acidic condition RP-LC-ESI-qToF-MS/MS	<ul style="list-style-type: none"> • Low stability of Schiff bases during ESI. • Unique fragmentation pattern (presence and absence type of difference). • Low stability of Schiff base during MS/MS (complete disappearance of the peak at high CID voltages). 	<ul style="list-style-type: none"> • Low stability of Schiff bases during ESI. • Less unique fragmentation pattern (differ only in intensity). • Higher stability of ARP during fragmentation (ARP reluctant to be fragmented). 	<ul style="list-style-type: none"> • Low stability of Schiff base during ESI. • Unique fragmentation pattern. • Low abundance (low intensities of daughter ions).
Neutral condition DI-ESI-qToF-MS/MS	<ul style="list-style-type: none"> • Low abundance (too low to perform MS/MS). 	<ul style="list-style-type: none"> • Less unique fragmentation pattern (differ only in intensity). • Higher stability during fragmentation (ARP reluctant to be fragmented). 	<ul style="list-style-type: none"> • Unique fragmentation pattern.

ARP Amadori Rearrangement Product

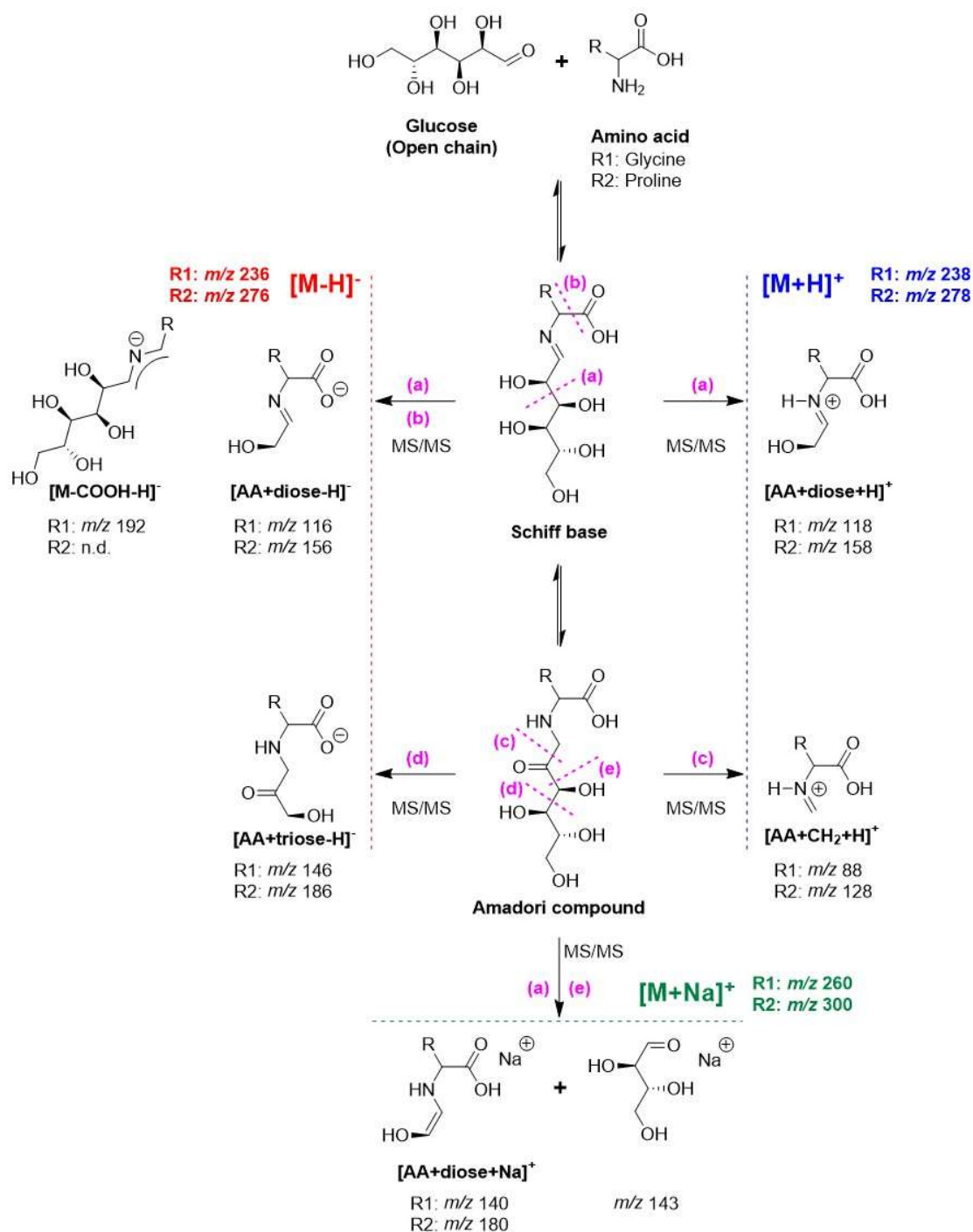


Figure 1: MS/MS fragmentations generating diagnostic ions (pathways a to e) from protonated $[M+H]^+$, sodiated $[M+Na]^+$, and deprotonated $[M-H]^-$ molecular ions of Schiff bases and ARPs of glycine (R1) and proline (R2). (n.d.: not detected)
 *Identical ions with different intensities are produced from the Schiff base and Amadori precursors

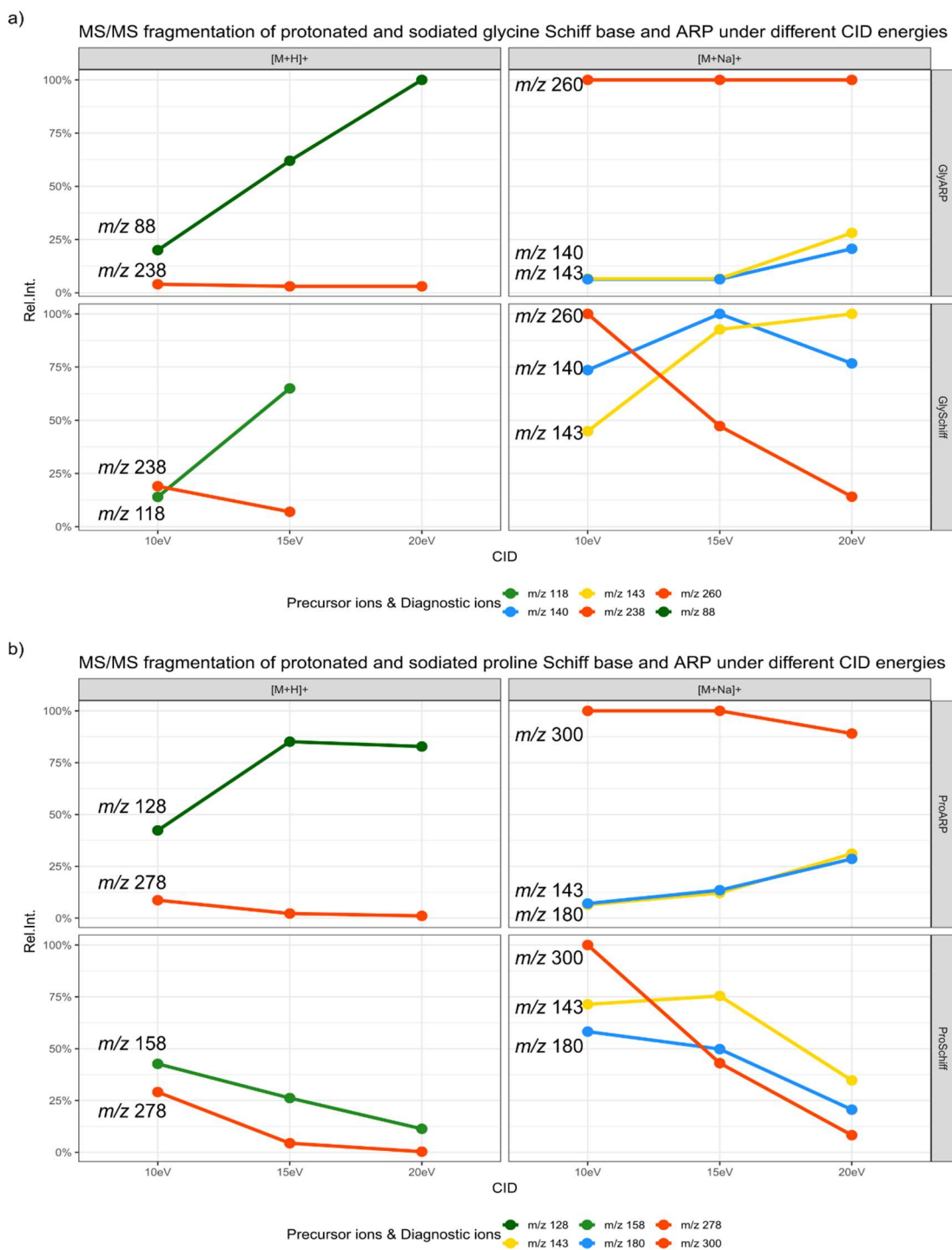


Figure 2: The effect of CID energies on the relative intensities of the diagnostic (green, blue, and yellow) and the precursor ions (red). See Figure 1 for the identity of the ions.

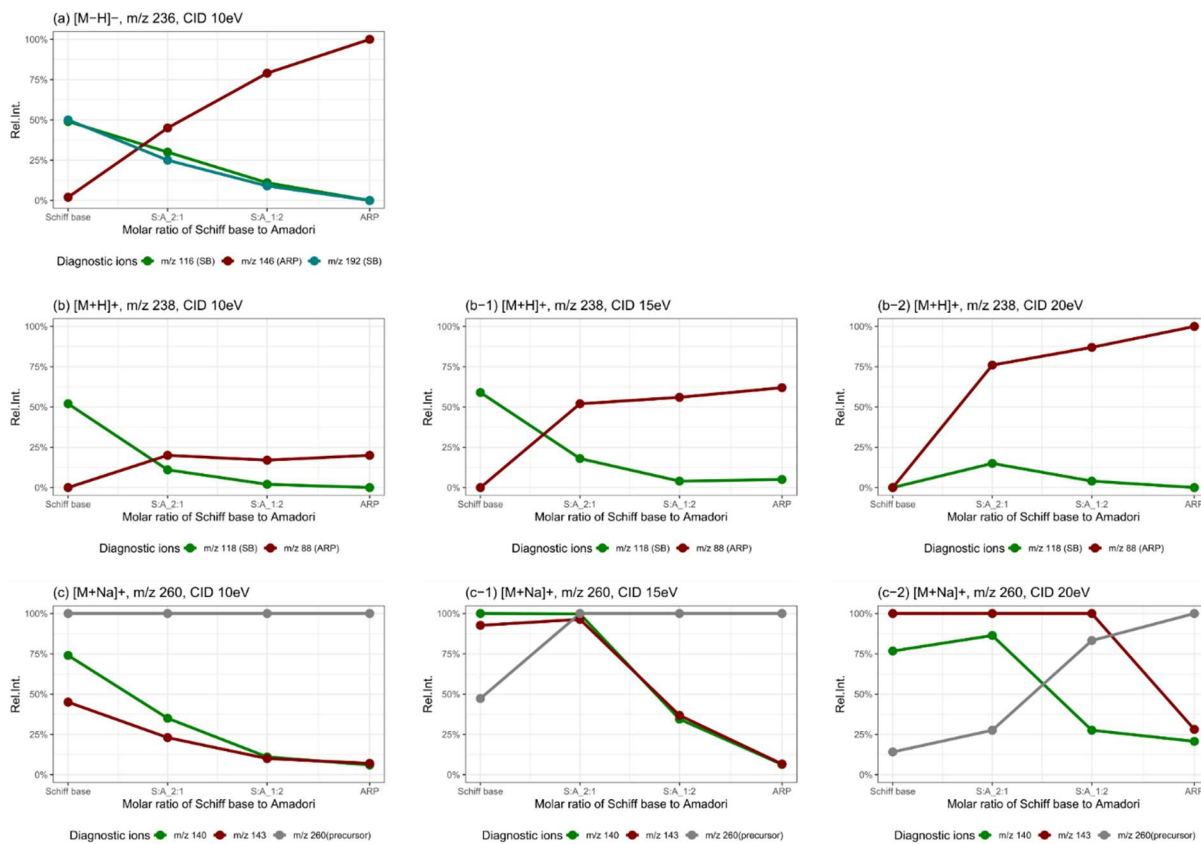


Figure 3: Plot of relative intensities of the diagnostic ions versus composition of the mixture of Schiff bases and ARPs.

Intracellular accumulation of advanced glycation end products induces osteoblast apoptosis *via* endoplasmic reticulum stress

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Osteoporosis is a major public health problem and is estimated to affect more than 200 million people worldwide (1). The incidence of osteoporosis increases with age (2), and the mortality rate after osteoporotic fractures is higher than that of the general population (3). Bone remodeling is a lifelong process that depends on a correct balance between bone resorption by osteoclasts and bone formation by osteoblasts. In contrast, remodeling imbalance, such as decrease in osteoblast or increase in osteoclast, results in osteoporosis. (4). Osteoblasts promote bone formation by synthesizing new bone collagen matrix and mineralization (5). Excessive osteoblast apoptosis is associated with reduced osteoblast numbers and inhibited bone formation (6). Moreover, decreased osteoblast numbers contribute to age-related bone loss (7). Therefore, excessive osteoblast apoptosis is a crucial pathogenetic mechanism underlying age-related osteoporosis.

AGEs are known to accumulate in the bone matrix with age and to increase due to pathogenesis caused by diabetes mellitus (8) and chronic kidney disease (9). Previous studies reported that extracellular AGEs induced osteoblast apoptosis and abnormal differentiation (10). In contrast, little is known regarding the association between intracellular AGEs and osteoblast apoptosis. Therefore, we investigated the effect of intracellular AGE accumulation on the induction of apoptosis in osteoblasts *in vitro* and *in vivo*.

In vitro, murine osteoblastic MC3T3-E1 cells and human osteoblastic hFOB 1.19 cells were treated with glycolaldehyde (GA), an AGE precursor. GA-induced intracellular AGE accumulation induced osteoblastic apoptosis through the activation of ER stress-related proteins (such as glucose-regulated protein 78, inositol-requiring protein-1 α (IRE1 α), p38 and c-Jun N-terminal kinase). Moreover, IRE1 α , one of the ER stress sensors, knocking down improved osteoblast apoptosis by inhibiting JNK and p38 phosphorylation. *In vivo*, the association between AGE accumulation and osteoblast apoptosis was analyzed in human vertebral bodies acquired from cadavers with pathological anatomy. the ratio between AGE- and terminal deoxynucleotidyl transferase-mediated

dUTP nick end labeling (TUNEL)-positive osteoblasts in human vertebral bodies was significantly higher in an elderly group (average age of 77.5) than in a younger group (average age of 19.0). Double AGE and TUNEL staining also revealed that AGE-positive osteoblasts in the elder group were partially TUNEL-positive. These findings demonstrated that intracellular AGE-induced ER stress is one mechanism underlying osteoblast apoptosis (11). This study may provide novel insight into the molecular mechanisms of osteoblast apoptosis and age-related osteoporosis.

References

1. Cooper C. Epidemiology of osteoporosis. *Osteoporos. Int.* 1999;9(Suppl 2):S2-S8
2. Reginster JY, Burlet N. Osteoporosis: A still increasing prevalence. *Bone.* 2006;38(Suppl.):S4–S9.
3. Center JR, Nguyen TV, Schneider D, Sambrook PN, Eisman JA. Mortality after all major types of osteoporotic fracture in men and women: an observational study. *Lancet.* 1999;353(9156):878–882.
4. Weinstein RS, Manolagas SC. Apoptosis and osteoporosis. *Am J Med.* 2001;108(2):153-164.
5. Karsenty G, Kronenberg HM, Settembre C. Genetic control of bone formation. *Annu Rev Cell Dev Biol.* 2009;25:629-648.
6. Jilka RL, Weinstein RS, Parfitt AM, Manolagas SC. Quantifying osteoblast and osteocyte apoptosis: challenges and rewards. *J. Bone Miner. Res.* 2007;22(10):1492–1501.
7. Kassem M, Marie PJ. Senescence-associated intrinsic mechanisms of osteoblast dysfunctions. *Aging Cell.* 2011;10(2):191–197.
8. Saito M, Fujii K, Mori Y, Marumo K. Role of collagen enzymatic and glycation induced cross-links as a determinant of bone quality in spontaneously diabetic WBN/Kob rats. *Osteoporos Int.* 2006;17(10):1514-1523.
9. Mitome J, Yamamoto H, Saito M, Yokoyama K, Marumo K, Hosoya T. Nonenzymatic cross-linking pentosidine increase in bone collagen and are associated with disorders of bone mineralization in dialysis patients. *Calcified Tissue Int.* 2011;88(6): 521-529.
10. Meng HZ, Zhang WL, Liu F, Yang MW. Advanced glycation end products affect osteoblast proliferation and function by modulating autophagy via the receptor of advanced glycation end products/Raf protein/ mitogen-activated protein kinase/extracellular signalregulated kinase kinase/extracellular signal-regulated kinase (RAGE/Raf/MEK/ERK) pathway. *J Biol Chem.* 2015;290(47):28189-28199.
11. Suzuki R, Fujiwara Y, Saito M, Arakawa S, Shirakawa JI, Yamanaka M, Komohara Y, Marumo K, Nagai R. Intracellular Accumulation of Advanced Glycation End Products Induces Osteoblast Apoptosis Via Endoplasmic Reticulum Stress. *J Bone Miner Res.* 2020;35(10):1992-2003

Highlights of the glycation literature (January 2021 - March 2021)

Papers of Editors' Choice

- Li Y, Quan W, Jia X, He Z, Wang Z, Zeng M, Chen J. Profiles of initial, intermediate, and advanced stages of harmful Maillard reaction products in whole-milk powders pre-treated with different heat loads during 18 months of storage. *Food Chem.* 2021 Feb 19;351:129361. Epub ahead of print.
- Guo Y, Jia X, Cui Y, Song Y, Wang S, Geng Y, Li R, Gao W, Fu D. Sirt3-mediated mitophagy regulates AGEs-induced BMSCs senescence and senile osteoporosis. *Redox Biol.* 2021 Feb 24;41:101915. Epub ahead of print.
- Bourgoignon JM, Spiers JG, Robinson SW, Scheiblich H, Glynn P, Ortori C, Bradley SJ, Tobin AB, Steinert JR. Inhibition of neuroinflammatory nitric oxide signaling suppresses glycation and prevents neuronal dysfunction in mouse prion disease. *Proc Natl Acad Sci U S A.* 2021 Mar 9;118(10):e2009579118.
- Shi J, Zhang Q, Zhao XH, Wang L. The impact of caseinate oligochitosan-glycation by transglutaminase on amino acid compositions and immune-promoting activity in BALB/c mice of the tryptic caseinate hydrolysate. *Food Chem.* 2021 Feb 16;350:129302. Epub ahead of print.
- Zhang W, Zhang B, Ye Y, Zhu H. Corrigendum to "Methylglyoxal- hydroimidazolones (MG-Hs) instead of Nε-(carboxymethyl)-l-lysine (CML) is the major advanced glycation end-product during drying process in black tea" [*Food Chem.* 333 (2020) 127499]. *Food Chem.* 2021 Feb 15;350:129326. Epub ahead of print.
- Yang M, Liu J, Yang X, Li S, Li C, Liu B, Ma S, Liu X, Du Z, Zhang T, Yu Y. Effect of glycation degree on the in vitro simulated gastrointestinal digestion: A promising formulation for egg white gel with controlled digestibility. *Food Chem.* 2021 Jul 1;349:129096.
- Liu Z, Zhu H, Ma Y, Tang Z, Zhao N, Wang Y, Pan S. AGEs exacerbates coronary microvascular dysfunction in NoCAD by activating endoplasmic reticulum stress-mediated PERK signaling pathway. *Metabolism.* 2021 Jan 22;117:154710. Epub ahead of print.
- Zhou X, Ulaszewska MM, De Gobba C, Rinnan Å, Poulsen MW, Chen J, Mattivi F, Hedegaard RV, Skibsted LH, Dragsted LO. New Advanced Glycation End Products Observed in Rat Urine by Untargeted Metabolomics after Feeding with Heat-Treated Skimmed Milk Powder. *Mol Nutr Food Res.* 2021 Feb 9:e2001049. Epub ahead of print.
- Akhter F, Chen D, Akhter A, Yan SF, Yan SS. Age-dependent accumulation of dicarbonyls and advanced glycation endproducts (AGEs) associates with mitochondrial stress. *Free Radic Biol Med.* 2021 Feb 20;164:429-438.
- Zhang H, Troise AD, Zhang H, Fogliano V. Cocoa melanoidins reduce the formation of dietary advanced glycation end-products in dairy mimicking system. *Food Chem.* 2021 May 30;345:128827.
- Rock CA, Keeney S, Zakharchenko A, Takano H, Spiegel DA, Krieger AM, Ferrari G, Levy RJ. Model studies of advanced glycation end product modification of heterograft biomaterials: The effects of in vitro glucose, glyoxal, and serum albumin on collagen structure and mechanical properties. *Acta Biomater.* 2021 Mar 15;123:275-285. Epub 2021 Jan 11.
- Yan Z, Luo H, Xie B, Tian T, Li S, Chen Z, Liu J, Zhao X, Zhang L, Deng Y, Billiar TR,

- Jiang Y. Targeting adaptor protein SLP76 of RAGE as a therapeutic approach for lethal sepsis. *Nat Commun.* 2021 Jan 12;12(1):308.
- Bhinder S, Kumari S, Singh B, Kaur A, Singh N. Impact of germination on phenolic composition, antioxidant properties, antinutritional factors, mineral content and Maillard reaction products of malted quinoa flour. *Food Chem.* 2021 Jun 1;346:128915.
 - Paria D, Convertino A, Mussi V, Maiolo L, Barman I. Silver-Coated Disordered Silicon Nanowires Provide Highly Sensitive Label-Free Glycated Albumin Detection through Molecular Trapping and Plasmonic Hotspot Formation. *Adv Healthc Mater.* 2021 Feb;10(3):e2001110.
 - Quan W, Wu Z, Jiao Y, Liu G, Wang Z, He Z, Tao G, Qin F, Zeng M, Chen J. Exploring the relationship between potato components and Maillard reaction derivative harmful products using multivariate statistical analysis. *Food Chem.* 2021 Mar 1;339:127853.
 - Kim S, Shin WS. Formation of a novel coating material containing lutein and zeaxanthin via a Maillard reaction between bovine serum albumin and fucoidan. *Food Chem.* 2021 May 1;343:128437.
 - Karbasi M, Sánchez-Ferrer A, Adamcik J, Askari G, Madadlou A, Mezzenga R. Covalent β -lactoglobulin-maltodextrin amyloid fibril conjugate prepared by the Maillard reaction. *Food Chem.* 2021 Apr 16;342:128388.
 - Feng J, Berton-Carabin CC, Ataç Mogol B, Schroën K, Fogliano V. Glycation of soy proteins leads to a range of fractions with various supramolecular assemblies and surface activities. *Food Chem.* 2021 May 1;343:128556.
 - Gutierrez-Mariscal FM, Cardelo MP, de la Cruz S, Alcalá-Díaz JF, Roncero-Ramos I, Guler I, Vals-Delgado C, López-Moreno A, Luque RM, Delgado-Lista J, Perez-Martinez P, Yubero-Serrano EM, Lopez-Miranda J. Reduction in Circulating Advanced Glycation End Products by Mediterranean Diet Is Associated with Increased Likelihood of Type 2 Diabetes Remission in Patients with Coronary Heart Disease: From the Cordioprev Study. *Mol Nutr Food Res.* 2021 Jan;65(1):e1901290.
 - Sergi D, Boulestin H, Campbell FM, Williams LM. The Role of Dietary Advanced Glycation End Products in Metabolic Dysfunction. *Mol Nutr Food Res.* 2021 Jan;65(1):e1900934. Epub 2020 Apr 20.
1. Ali SM, Chen P, Sheikh S, Ahmad A, Ahmad M, Paithankar M, Desai B, Patel P, Khan M, Chaturvedi A, Patel R, Panchal DT, Shah K, Chavda V, Saboo BD, Patel A, Ahmad I. **Thymoquinone with Metformin Decreases Fasting, Post Prandial Glucose, and HbA1c in Type 2 Diabetic Patients.** *Drug Res (Stuttg).* 2021 Mar 8. Epub ahead of print.
 2. Zhang Z, Li XM, Li Z, Lin H. **Investigation of glycated shrimp tropomyosin as a hypoallergen for potential immunotherapy.** *Food Funct.* 2021 Mar 8. Epub ahead of print.
 3. Zhang HL, Zhu JE, Li JX, Li XL, Sun LP, Xu HX, Yu SY. **US-guided percutaneous microwave ablation (MWA) of submandibular gland: A new minimal invasive and effective treatment for refractory sialorrhea and treatment response evaluation with contrast-enhanced imaging techniques.** *Clin Hemorheol Microcirc.* 2021 Feb 26. Epub ahead of print.

4. Mori Y, Hiromura M, Terasaki M, Kushima H, Ohara M, Fukui T, Takahashi Y, Yamagishi SI. **Very rare case of Graves' disease with resistance to methimazole: a case report and literature review.** *J Int Med Res.* 2021 Mar;49(3):300060521996192.
5. Yang L, Liu Y, Wang Y, Li J, Liu N. **Azeliragon ameliorates Alzheimer's disease via the Janus tyrosine kinase and signal transducer and activator of transcription signaling pathway.** *Clinics (Sao Paulo).* 2021 Mar 8;76:e2348.
6. Ling S, Xu JW. **NETosis as a Pathogenic Factor for Heart Failure.** *Oxid Med Cell Longev.* 2021 Feb 23;2021:6687096.
7. Braga AA, Bortolin RH, Graciano-Saldarriaga ME, Hirata TD, Cerda A, de Freitas RC, Lin-Wang HT, Borges JB, França JI, Masi LN, Curi R, Pithon-Curi TC, Sampaio MF, Castro LR, Bastos GM, Hirata RD, Hirata MH. **High serum miR-421 is associated with metabolic dysregulation and inflammation in patients with metabolic syndrome.** *Epigenomics.* 2021 Mar 8. Epub ahead of print.
8. Hong SH, Kim YB, Choi HS, Jeong TD, Kim JT, Sung YA. **Association of Vitamin D Deficiency with Diabetic Nephropathy.** *Endocrinol Metab (Seoul).* 2021 Feb;36(1):106-113. 2020.826. Epub 2021 Feb 24.
9. Huang HL, Huang WC, Lin KD, Liu SS, Lee MR, Cheng MH, Chin CS, Lu PL, Sheu CC, Wang JY, Lee IT, Chong IW. **Completion Rate and Safety of Programmatic Screening and Treatment for Latent Tuberculosis Infection in Elderly Patients with Poorly Controlled Diabetic Mellitus: A Prospective Multicenter Study.** *Clin Infect Dis.* 2021 Mar 3:ciab209. Epub ahead of print.
10. Agho ET, Owotade FJ, Kolawole BA, Oyetola EO, Adedeji TA. **Salivary inflammatory biomarkers and glycated haemoglobin among patients with type 2 diabetic mellitus.** *BMC Oral Health.* 2021 Mar 6;21(1):101.
11. Rahman ML, Feng YA, Fiehn O, Albert PS, Tsai MY, Zhu Y, Wang X, Tekola-Ayele F, Liang L, Zhang C. **Plasma lipidomics profile in pregnancy and gestational diabetes risk: a prospective study in a multiracial/ethnic cohort.** *BMJ Open Diabetes Res Care.* 2021 Mar;9(1):e001551.
12. Phillips E, Ponce J, Bhojrul S, Cunneen SA, Gomez E, Jacobs M, Kipnes M, Marema RT, Schwiens M, Waggoner JR, DeMarchi J. **Safety and effectiveness of REALIZE adjustable gastric band: 5-year prospective study.** *Surg Obes Relat Dis.* 2021 Jan 22:S1550 7289(21)00045-9. Epub ahead of print.
13. Chaghouri P, Maalouf N, Peters SL, Nowak PJ, Peczek K, Zasowska-Nowak A, Nowicki M. **Two Faces of Vitamin C in Hemodialysis Patients: Relation to Oxidative Stress and Inflammation.** *Nutrients.* 2021 Feb 27;13(3):791.
14. Altomare A, Baron G, Balbinot M, Pedretti A, Zoanni B, Brioschi M, Agostoni P, Carini M, Banfi C, Aldini G. **In-Depth AGE and ALE Profiling of Human Albumin in Heart Failure: Ex Vivo Studies.** *Antioxidants (Basel).* 2021 Feb 27;10(3):358.
15. Gvozdanović Z, Farčić N, Šimić H, Buljanović V, Gvozdanović L, Katalinić S, Pačarić S, Gvozdanović D, Dujmić Ž, Miškić B, Barać I, Prlić N. **The Impact of Education, COVID-19 and Risk Factors on the Quality of Life in Patients with Type 2 Diabetes.** *Int J Environ Res Public Health.* 2021 Feb 27;18(5):2332.
16. Lin GC, Küng E, Smajlhodzic M, Domazet S, Friedl HP, Angerer J, Wisgrill L, Berger A, Bingle L, Peham JR, Neuhaus W. **Directed Transport of CRP Across In Vitro Models of the Blood-Saliva Barrier Strengthens the Feasibility of Salivary CRP as Biomarker for Neonatal Sepsis.** *Pharmaceutics.* 2021 Feb 12;13(2):256.

17. Peukert K, Seeliger B, Fox M, Feuerborn C, Sauer A, Schuss P, Schneider M, David S, Welte T, Putensen C, Wilhelm C, Steinhagen F, Bode C. **SP-D Serum Levels Reveal Distinct Epithelial Damage in Direct Human ARDS.** *J Clin Med.* 2021 Feb 12;10(4):737.
18. Castro MJ, Jiménez JM, López M, Cao MJ, Santos-Torres J, López A, Moreno A, Ruiz-Tovar J. **Impact of Preoperative Total Proteins and Glycated Hemoglobin on Recurrences after Early Colorectal Cancer.** *Nutrients.* 2021 Feb 23;13(2):711.
19. Casadei G, Filippini M, Brognara L. **Glycated Hemoglobin (HbA1c) as a Biomarker for Diabetic Foot Peripheral Neuropathy.** *Diseases.* 2021 Feb 22;9(1):16.
20. Lee DY, Lin YC, Chang GD. **Biochemical Regulation of the Glyoxalase System in Response to Insulin Signaling.** *Antioxidants (Basel).* 2021 Feb 22;10(2):326.
21. Balançã B, Desmurs L, Grelier J, Perret-Liaudet A, Lukaszewicz AC. **DAMPs and RAGE Pathophysiology at the Acute Phase of Brain Injury: An Overview.** *Int J Mol Sci.* 2021 Feb 28;22(5):2439.
22. Kim Y, Lee SH, Kim C, Kang MK, Yoon BW, Kim TJ, Bae JS, Lee JH. **Personalized Consideration of Admission-Glucose Gap between Estimated Average and Initial Glucose Levels on Short-Term Stroke Outcome.** *J Pers Med.* 2021 Feb 18;11(2):139.
23. Meo SA, Abukhalaf AA, Alomar AA, Alessa OM, Sumaya OY, Meo AS. **Prevalence of Prediabetes and Type 2 Diabetes Mellitus in Football Players: A Novel Multi Football Clubs Cross Sectional Study.** *Int J Environ Res Public Health.* 2021 Feb 11;18(4):1763.
24. Buscemi S, Corleo D, Buscemi C, Randazzo C, Borzì AM, Barile AM, Rosafio G, Ciaccio M, Caldarella R, Meli F, Maestri S, Currenti W, Cincione RI, Murabito P, Galvano F. **Influence of Habitual Dairy Food Intake on LDL Cholesterol in a Population-Based Cohort.** *Nutrients.* 2021 Feb 11;13(2):593.
25. Solares-Pascasio JI, Ceballos G, Calzada F, Barbosa E, Velazquez C. **Antihyperglycemic and Lipid Profile Effects of *Salvia amarissima* Ortega on Streptozocin-Induced Type 2 Diabetic Mice.** *Molecules.* 2021 Feb 11;26(4):947.
26. Nqweniso S, Walter C, du Randt R, Adams L, Beckmann J, Degen J, Gall S, Joubert N, Lang C, Long KZ, Müller I, Nienaber M, Pühse U, Seelig H, Smith D, Steinmann P, Utzinger J, Gerber M. **Physical Activity, Cardiorespiratory Fitness and Clustered Cardiovascular Risk in South African Primary Schoolchildren from Disadvantaged Communities: A Cross-Sectional Study.** *Int J Environ Res Public Health.* 2021 Feb 21;18(4):2080.
27. Samoilova J, Matveeva M, Tonkih O, Kudlau D, Oleynik O, Kanev A. **A Prospective Study: Highlights of Hippocampal Spectroscopy in Cognitive Impairment in Patients with Type 1 and Type 2 Diabetes.** *J Pers Med.* 2021 Feb 19;11(2):148.
28. Wang JD, Wang YY, Lin SY, Chang CY, Li JR, Huang SW, Chen WY, Liao SL, Chen CJ. **Exosomal HMGB1 Promoted Cancer Malignancy.** *Cancers (Basel).* 2021 Feb 19;13(4):877.
29. Sima DI, Bondor CI, Vereşiu IA, Gâvan NA, Borzan CM. **Hospitalization Costs of Lower Limb Ulcerations and Amputations in Patients with Diabetes in Romania.** *Int J Environ Res Public Health.* 2021 Feb 24;18(5):2230.
30. Hong H, Fan H, Roy BC, Wu J. **Amylase enhances production of low molecular weight collagen peptides from the skin of spent hen, bovine, porcine, and tilapia.** *Food Chem.* 2021 Feb 20;352:129355. Epub ahead of print.

31. Abuelezz SA, Hendawy N. **HMGB1/RAGE/TLR4 axis and glutamate as novel targets for PCSK9 inhibitor in high fat cholesterol diet induced cognitive impairment and amyloidosis.** *Life Sci.* 2021 Mar 2;273:119310. Epub ahead of print.
32. Davies M, Færch L, Jeppesen OK, Pakseresht A, Pedersen SD, Perreault L, Rosenstock J, Shimomura I, Viljoen A, Wadden TA, Lingvay I; STEP 2 Study Group. **Semaglutide 2.4 mg once a week in adults with overweight or obesity, and type 2 diabetes (STEP 2): a randomised, double-blind, double-dummy, placebo-controlled, phase 3 trial.** *Lancet.* 2021 Mar 2:S0140-6736(21)00213-0. Epub ahead of print.
33. Ruscitti P, Berardicurti O, Cipriani P, Giacomelli R; TRACK study group. **Benefits of anakinra versus TNF inhibitors in rheumatoid arthritis and type 2 diabetes: long-term findings from participants furtherly followed-up in the TRACK study, a multicentre, open-label, randomised, controlled trial.** *Clin Exp Rheumatol.* 2021 Mar 3. Epub ahead of print.
34. Li X, Li C, Shi M, Qu Y, Huo L, Hao Z, Yue F, Gan L, Wang S. **Which Glucose Parameter Best Predicts Poor Outcome after Mechanical Thrombectomy for Acute Large Vessel Occlusion Stroke?** *Intern Med J.* 2021 Mar 4. Epub ahead of print.
35. Soremekun OS, Ezenwa C, Soliman M, Chikowore T, Nashiru O, Fatumo S. **Transcription-translation error: *In-silico* investigation of the structural and functional impact of deleterious single nucleotide polymorphisms in *GULP1* gene.** *Inform Med Unlocked.* 2021;22:100503. Epub 2020 Dec 24.
36. Prasanna Kumar KM, Seshadri K, Aravind SR, Deb P, Modi KD, Gopal RA, G VK, Moses CA, Abhyankar M, Revenkar S. **Real-World Observational Study of Glimepiride and Metformin Fixed-Dose Combination Along With Insulin in the Management of Type 2 Diabetes Mellitus: Indian Experience.** *Cureus.* 2021 Jan 30;13(1):e13020.
37. Nguyen LA, Pouwer F, Lodder P, Hartman E, Winterdijk P, Aanstoot HJ, Nefs G. **Depression and anxiety in adolescents with type 1 diabetes and their parents.** *Pediatr Res.* 2021 Mar 4. Epub ahead of print.
38. Kong L, Zhao H, Fan J, Wang Q, Li J, Bai J, Mao J. **Predictors of frailty among Chinese community-dwelling older adults with type 2 diabetes: a cross-sectional survey.** *BMJ Open.* 2021 Mar 4;11(3):e041578.
39. Iakunchykova O, Averina M, Wilsgaard T, Malyutina S, Kudryavtsev AV, Cook S, Wild S, Eggen AE, Hopstock LA, Leon DA. **What factors explain the much higher diabetes prevalence in Russia compared with Norway? Major sex differences in the contribution of adiposity.** *BMJ Open Diabetes Res Care.* 2021 Mar;9(1):e002021.
40. He P, Zhang J, Gao T, Wang Y, Peng T. **Huangyusang decoction for Type 2 diabetes: A protocol for systematic review and meta analysis.** *Medicine (Baltimore).* 2021 Feb 26;100(8):e24576.
41. Lotan R, Ganmore I, Livny A, Shelly S, Zacharia M, Uribarri J, Beisswenger P, Cai W, Schnaider Beerli M, Troen AM. **Design and Feasibility of a Randomized Controlled Pilot Trial to Reduce Exposure and Cognitive Risk Associated With Advanced Glycation End Products in Older Adults With Type 2 Diabetes.** *Front Nutr.* 2021 Feb 15;8:614149.
42. Elsharkawy RE, Abdel Azim GS, Osman MA, Maghraby HM, Mohamed RA, Abdelsalam EM, Ebrahim EE, Seliem NMA. **Peripheral Polyneuropathy and Cognitive Impairment in Type II Diabetes Mellitus.** *Neuropsychiatr Dis Treat.* 2021 Feb 24;17:627-635.

43. Wu L, Fang C, Zhang L, Yuan W, Yu X, Lu H. **Integrated Strategy for Discovery and Validation of Glycated Candidate Biomarkers for Hemodialysis Patients with Cardiovascular Complications.** *Anal Chem.* 2021 Mar 4. Epub ahead of print.
44. Remington C, Ruth J, Hebert AA. **Primary hyperhidrosis in children: A review of therapeutics.** *Pediatr Dermatol.* 2021 Mar 4. Epub ahead of print.
45. Pratley RE, Crowley MJ, Gislum M, Hertz CL, Jensen TB, Khunti K, Mosenzon O, Buse JB. **Oral Semaglutide Reduces HbA_{1c} and Body Weight in Patients with Type 2 Diabetes Regardless of Background Glucose-Lowering Medication: PIONEER Subgroup Analyses.** *Diabetes Ther.* 2021 Mar 4. Epub ahead of print.
46. Si Y, Wang A, Yang Y, Liu H, Gu S, Mu Y, Lyu Z. **Fasting Blood Glucose and 2-h Postprandial Blood Glucose Predict Hypertension: A Report from the REACTION Study.** *Diabetes Ther.* 2021 Mar 4. Epub ahead of print.
47. Chaves OA, Soares MAG, Campos de Oliveira MC. **Monosaccharides interact weakly with human serum albumin. Insights for the functional perturbations on the binding capacity of albumin.** *Carbohydr Res.* 2021 Feb 26;501:108274. Epub ahead of print.
48. de Oliveira C, Sabbah W, Schneider IJC, Bernabé E. **Complete tooth loss and allostatic load changes later in life: A 12-year follow-up analysis of the English Longitudinal Study of Ageing.** *Psychosom Med.* 2021 Feb 27. Epub ahead of print.
49. Hesse R, van der Westhuizen DJ, George JA. **COVID-19-Related Laboratory Analyte Changes and the Relationship Between SARS-CoV-2 and HIV, TB, and HbA_{1c} in South Africa.** *Adv Exp Med Biol.* 2021;1321:183-197.
50. Gong S, Hu H, Zhao K, Yang T. **Cost-Effectiveness of Dual Bronchodilator Indacaterol/Glycopyrronium for COPD Treatment in China.** *Int J Chron Obstruct Pulmon Dis.* 2021 Feb 23;16:433-441.
51. Majewska A, Stanirowski P, Wielgoś M, Bomba-Opoń D. **Flash glucose monitoring in gestational diabetes mellitus: study protocol for a randomised controlled trial.** *BMJ Open.* 2021 Mar 2;11(3):e041486.
52. Wu X, Zhang Z, He Z, Wang Z, Qin F, Zeng M, Chen J. **Effect of Freeze-Thaw Cycles on the Oxidation of Protein and Fat and Its Relationship with the Formation of Heterocyclic Aromatic Amines and Advanced Glycation End Products in Raw Meat.** *Molecules.* 2021 Feb 26;26(5):1264.
53. Zuhlendri F, Ravalia M, Kripal K, Chandrasekaran K, Fearnley J, Perera CO. **Propolis in Metabolic Syndrome and Its Associated Chronic Diseases: A Narrative Review.** *Antioxidants (Basel).* 2021 Feb 26;10(3):348.
54. Liu X, Yang Q, Yang M, Du Z, Wei C, Zhang T, Liu B, Liu J. **Ultrasound- assisted Maillard reaction of ovalbumin/xylose: The enhancement of functional properties and its mechanism.** *Ultrason Sonochem.* 2021 Feb 2;73:105477. Epub ahead of print.
55. Rosa TS, Corrêa HL, Deus LA, Stone W, Reis AL, Gadelha AB, de Araújo TB, Junior PRS, Moraes M, Silva JAB, Tzanno-Martins C, Gustavo Simões H, Prestes J, Neves RVP. **Effects of dynamic and isometric resistance training protocols on metabolic profile in hemodialysis patients: a randomized controlled trial.** *Appl Physiol Nutr Metab.* 2021 Mar 2. Epub ahead of print.
56. Fonseca LF, Araújo AB, Quadros KRDS, Carbonara CEM, Dertkigil SSJ, Sposito AC, Oliveira RB. **AGEs accumulation is related to muscle degeneration and vascular calcification in peritoneal dialysis patients.** *J Bras Nefrol.* 2021 Feb 26;S0101-28002021005024301. English, Portuguese. Epub ahead of print.

57. Deneva TI, Ianakiev YP. **Evaluation of Anxiety, Depression, and Biological Markers in Health Professionals with Burnout.** *Folia Med (Plovdiv)*. 2021 Feb 28;63(1):122-128.
58. Lah S, Cheung NW, Lee V, Athayde N, Inglis E, Padmanabhan S. **Aspirin and preeclampsia prevention in women with pre-existing diabetes: a retrospective study.** *Intern Med J*. 2021 Mar 1. Epub ahead of print.
59. Uemura F, Okada Y, Torimoto K, Tanaka Y. **Enlarged glycemic variability in sulfonylurea-treated well-controlled type 2 diabetics identified using continuous glucose monitoring.** *Sci Rep*. 2021 Mar 1;11(1):4875.
60. Travia KR, Kahkoska AR, Igudesman D, Souris KJ, Beasley C, Mayer-Davis EJ. **Impact of Hurricane Matthew on Diabetes Self-Management and Outcomes.** *N C Med J*. 2021 Mar-Apr;82(2):100-107.
61. Rkieh L, Sengar A, Parikh A, Mills A. **An Exploratory Screening Study for Type 2 Diabetes in Hospitalized Adult Medicine Patients.** *Can J Diabetes*. 2021 Jan 13:S1499-2671(21)00002-2. Epub ahead of print.
62. Chayaratanasin P, Adisakwattana S, Thilavech T. **Protective role of Clitoria ternatea L. flower extract on methylglyoxal-induced protein glycation and oxidative damage to DNA.** *BMC Complement Med Ther*. 2021 Mar 1;21(1):80.
63. Li Y, Wu Y, Quan W, Jia X, He Z, Wang Z, Adhikari B, Chen J, Zeng M. **Quantitation of furosine, furfurals, and advanced glycation end products in milk treated with pasteurization and sterilization methods applicable in China.** *Food Res Int*. 2021 Feb;140:110088. Epub 2020 Dec 29.
64. Ravichandran G, Lakshmanan DK, Murugesan S, Elangovan A, Rajasekaran NS, Thilagar S. **Attenuation of protein glycation by functional polyphenolics of dragon fruit (Hylocereus polyrhizus); an in vitro and in silico evaluation.** *Food Res Int*. 2021 Feb;140:110081. Epub 2020 Dec 29.
65. Nicholas JA, Yeap BB, Cross D, Burkhardt MS. **Psychological flexibility is associated with less diabetes distress and lower glycated haemoglobin in adults with type 1 diabetes.** *Intern Med J*. 2021 Mar 1. Epub ahead of print.
66. Monllor P, Giraldo E, Badia MC, de la Asuncion JG, Alonso MD, Lloret A, Vina J. **Serum Levels of Clusterin, PKR, and RAGE Correlate with Amyloid Burden in Alzheimer's Disease.** *J Alzheimers Dis*. 2021 Feb 20. Epub ahead of print.
67. Rabbani N, Xue M, Thornalley PJ. **Dicarbonyl stress, protein glycation and the unfolded protein response.** *Glycoconj J*. 2021 Mar 1. Epub ahead of print.
68. Andrisse S, Garcia-Reyes Y, Pyle L, Kelsey MM, Nadeau KJ, Cree-Green M. **Racial and Ethnic Differences in Metabolic Disease in Adolescents With Obesity and Polycystic Ovary Syndrome.** *J Endocr Soc*. 2021 Feb 2;5(4):bvab008.
69. Pietkiewicz J, Danielewicz R, Wandzel C, Beznosiuk J, Szuba A, Samsel- Czekala M, Gamian A. **Influence of Water Polarization Caused by Phonon Resonance on Catalytic Activity of Enolase.** *ACS Omega*. 2021 Feb 1;6(6):4255-4261.
70. Halpin DMG, Vogelmeier CF, Mezzi K, Gupta P, Kostikas K, Wedzicha JA. **Efficacy of indacaterol/glycopyrronium versus salmeterol/fluticasone in current and ex-smokers: a pooled analysis of IGNITE trials.** *ERJ Open Res*. 2021 Feb 22;7(1):00816-2020.
71. Lim MT, Ab Rahman N, Teh XR, Chan CL, Thevendran S, Ahmad Hamdi N, Lim KK, Sivasampu S. **Optimal cut-off points for adherence measure among patients with type 2 diabetes in primary care clinics: a retrospective analysis.** *Ther Adv Chronic Dis*. 2021 Feb 17;12:2040622321990264.

72. Saito S, Tanaka M, Satoh-Asahara N, Carare RO, Ihara M. **Taxifolin: A Potential Therapeutic Agent for Cerebral Amyloid Angiopathy.** *Front Pharmacol.* 2021 Feb 12;12:643357.
73. Zhang J, Du Y, Hu C, Liu Y, Liu J, Gao A, Zhao Y, Zhou Y. **Elevated Glycated Albumin in Serum Is Associated with Adverse Cardiac Outcomes in Patients with Acute Coronary Syndrome Who Underwent Revascularization Therapy.** *J Atheroscler Thromb.* 2021 Feb 27. Epub ahead of print.
74. Aalim H, Wang D, Luo Z. **Black rice (*Oryza sativa* L.) processing: Evaluation of physicochemical properties, in vitro starch digestibility, and phenolic functions linked to type 2 diabetes.** *Food Res Int.* 2021 Mar;141:109898. Epub 2020 Nov 10.
75. Bindayel IA. **Influence of iron deficiency anemia on glycated hemoglobin levels in non-diabetic Saudi women.** *J Int Med Res.* 2021 Feb;49(2):300060521990157.
76. Redondo A, Paradela-Dobarro B, Moscoso I, Moure-Álvarez M, Cebro-Márquez M, González-Juanatey JR, García-Seara J, Álvarez E. **Galectin-3 and soluble RAGE as new biomarkers of post-infarction cardiac remodeling.** *J Mol Med (Berl).* 2021 Feb 27. Epub ahead of print.
77. Serdarova M, Dimova R, Chakarova N, Grozeva G, Todorova A, Tankova T. **Relationship between cardiac autonomic neuropathy and cardio-metabolic risk profile in adults with type 1 diabetes.** *Diabetes Res Clin Pract.* 2021 Feb 25:108721. Epub ahead of print.
78. Moore JX, Bevel MS, Aslibekyan S, Akinyemiju T. **Temporal changes in allostatic load patterns by age, race/ethnicity, and gender among the US adult population; 1988-2018.** *Prev Med.* 2021 Feb 25:106483. Epub ahead of print.
79. Laudenslager M, Lazo M, Wang D, Selvin E, Chen PH, Pankow JS, Clark JM. **Association between the soluble receptor for advanced glycation end products (sRAGE) and NAFLD in participants in the Atherosclerosis Risk in Communities Study.** *Dig Liver Dis.* 2021 Feb 24:S1590-8658(21)00057-8. Epub ahead of print.
80. Horrow JC, Li W, Blobner M, Lombard J, Speek M, DeAngelis M, Herring WJ. **Actual versus ideal body weight dosing of sugammadex in morbidly obese patients offers faster reversal of rocuronium- or vecuronium-induced deep or moderate neuromuscular block: a randomized clinical trial.** *BMC Anesthesiol.* 2021 Feb 27;21(1):62.
81. Chen Q, Li H, Liu Q, Wang W, Deng F, Sun Z, Guo X, Wu S. **Does psychosocial stress modify the association of fine particulate matter and ozone with cardiovascular health indicators?** *Environ Pollut.* 2021 Feb 17;277:116726. Epub ahead of print.
82. Ramya R, Coral K, Bharathidevi SR. **RAGE silencing deters CML-AGE induced inflammation and TLR4 expression in endothelial cells.** *Exp Eye Res.* 2021 Feb 24:108519. Epub ahead of print.
83. Nagata H, Lyu J, Imachi H, Fukunaga K, Sato S, Kobayashi T, Saheki T, Seo K, Salimah JB, Iwama H, Sakamoto R, Ogawa Y, Murao K. **AGEs inhibit scavenger receptor class B type I gene expression via Smad1 in HUVECs.** *J Mol Endocrinol.* 2021 Feb 1:JME-20-0177.R1. Epub ahead of print.
84. Foudad H, Latreche S, Quessar A, Benkhedda S, Benabdelaziz A, Tliba S. **Relation entre la dysfonction diastolique du ventricule gauche et la presence d'atteintes coronaires chez le sujet diabétique type 2 [Relationship between left ventricular diastolic dysfunction and coronary disease in type 2 diabetes mellitus].** *Ann Cardiol Angeiol (Paris).* 2021 Feb 23:S0003-3928(20)30196-7. French. Epub ahead of print.

85. Haddad M, Hervé V, Ben Khedher MR, Rabanel JM, Ramassamy C. **Glutathione: an old and small molecule with great functions and new applications in the brain and in Alzheimer's disease.** *Antioxid Redox Signal.* 2021 Feb 26. Epub ahead of print.
86. Cabrera-García AI, Protschka M, Alber G, Kather S, Dengler F, Müller U, Steiner JM, Heilmann RM. **Dysregulation of gastrointestinal RAGE (receptor for advanced glycation end products) expression in dogs with chronic inflammatory enteropathy.** *Vet Immunol Immunopathol.* 2021 Feb 19;234:110216. Epub ahead of print.
87. Atzeni IM, van de Zande SC, Westra J, Zwerver J, Smit AJ, Mulder DJ. **The AGE reader: a non-invasive method to assess long term tissue damage.** *Methods.* 2021 Feb 23:S1046-2023(21)00059-1. Epub ahead of print.
88. Chiappalupi S, Salvadori L, Vukasinovic A, Donato R, Sorci G, Riuzzi F. **Targeting RAGE to prevent SARS-CoV-2-mediated multiple organ failure: Hypotheses and perspectives.** *Life Sci.* 2021 Feb 23;272:119251. Epub ahead of print.
89. Markaki I, Ntetsika T, Sorjonen K, Svenningsson P; BioPark Study Group. **Euglycemia Indicates Favorable Motor Outcome in Parkinson's Disease.** *Mov Disord.* 2021 Feb 26. Epub ahead of print.
90. Bensignor MO, Bomberg EM, Bramante CT, Divyalasya TV, Hale PM, Ramesh CK, Rudser KD, Kelly AS. **Effect of liraglutide treatment on body mass index and weight parameters in children and adolescents with type 2 diabetes: Post hoc analysis of the ellipse trial.** *Pediatr Obes.* 2021 Feb 25:e12778. Epub ahead of print.
91. Zhang L, Han L, Wang X, Wei Y, Zheng J, Zhao L, Tong X. **Exploring the mechanisms underlying the therapeutic effect of Salvia miltiorrhiza on diabetic nephropathy using network pharmacology and molecular docking.** *Biosci Rep.* 2021 Feb 26:BSR20203520. Epub ahead of print.
92. Holmager TLF, Meyrowitsch DW, Bahendeka S, Nielsen J. **Food intake and cardiometabolic risk factors in rural Uganda.** *Arch Public Health.* 2021 Feb 25;79(1):24.
93. Park CW, Yi HJ, Lee DH, Sung JH. **Association between HbA1C (glycated hemoglobin) and clinical outcomes in patients with subarachnoid hemorrhage after neuro-intervention.** *Curr Neurovasc Res.* 2021 Feb 24. Epub ahead of print.
94. Roddy GW. **Metabolic syndrome and the aging retina.** *Curr Opin Ophthalmol.* 2021 Feb 23. Epub ahead of print.
95. Zhou Y, Liu SX, Zhou YN, Wang J, Ji R. **Research on the relationship between RAGE and its ligand HMGB1, and prognosis and pathogenesis of gastric cancer with diabetes mellitus.** *Eur Rev Med Pharmacol Sci.* 2021 Feb;25(3):1339-1350.
96. Petriv N, Neubert L, Vatashchuk M, Timrott K, Suo H, Hochnadel I, Huber R, Petzold C, Hrushchenko A, Yatsenko AS, Shcherbata HR, Wedemeyer H, Lichtinghagen R, Falfushynska H, Lushchak V, Manns MP, Bantel H, Semchyshyn H, Yevsa T. **Increase of α -dicarbonyls in liver and receptor for advanced glycation end products on immune cells are linked to nonalcoholic fatty liver disease and liver cancer.** *Oncoimmunology.* 2021 Feb 8;10(1):1874159.
97. Zhang H, Mao YF, Zhao Y, Xu DF, Wang Y, Xu CF, Dong WW, Zhu XY, Ding N, Jiang L, Liu YJ. **Upregulation of Matrix Metalloproteinase-9 Protects against Sepsis-Induced Acute Lung Injury via Promoting the Release of Soluble Receptor for Advanced Glycation End Products.** *Oxid Med Cell Longev.* 2021 Feb 10;2021:8889313.

98. Zhu C, Hou X, Li M, Sun Q, Lu H, Bao Y, Wei L, Jia W, Jiang F. **Serum Glycated Albumin Levels Are Affected by Alcohol in Men of the Jinuo Ethnic Group in China.** *Can J Infect Dis Med Microbiol.* 2021 Feb 10;2021:6627074.
99. Chang HW, Lee IO, Kang H, Won YJ, Lim YS. **Coagulation Effect of Sugammadex as Determined by Thromboelastography in a Randomized Controlled Study of Surgical Patients.** *Int J Med Sci.* 2021 Jan 21;18(6):1318-1324.
100. Babiker A, Al Aqeel B, Marie S, Omer H, Bahabri A, Al Shaikh A, Zahrani N, Badri M, Al Dubayee M, Al Alwan I. **Quality of Life and Glycemic Control in Saudi Children with Type 1 Diabetes at Different Developmental Age Groups.** *Clin Med Insights Endocrinol Diabetes.* 2021 Feb 11;14:1179551421990678.
101. Matsumoto T, Matsuno M, Ikui N, Mizushina Y, Omiya Y, Ishibashi R, Ueda T, Mizukami H. **Identification of pheophorbide a as an inhibitor of receptor for advanced glycation end products in *Mallotus japonicus*.** *J Nat Med.* 2021 Feb 24. Epub ahead of print.
102. Lee MK, Lee DY, Ahn HY, Park CY. **A Novel User Utility Score for Diabetes Management Using Tailored Mobile Coaching: Secondary Analysis of a Randomized Controlled Trial.** *JMIR Mhealth Uhealth.* 2021 Feb 24;9(2):e17573.
103. Teo YH, Teo YN, Syn NL, Kow CS, Yoong CSY, Tan BYQ, Yeo TC, Lee CH, Lin W, Sia CH. **Effects of Sodium/Glucose Cotransporter 2 (SGLT2) Inhibitors on Cardiovascular and Metabolic Outcomes in Patients Without Diabetes Mellitus: A Systematic Review and Meta-Analysis of Randomized-Controlled Trials.** *J Am Heart Assoc.* 2021 Feb;10(5):e019463. Epub 2021 Feb 24.
104. Monteiro CI, Simões RP, Goulart CL, Silva CDD, Borghi-Silva A, Mendes RG. **Arterial stiffness in type 2 diabetes: determinants and indication of a discriminative value.** *Clinics (Sao Paulo).* 2021 Feb 22;76:e2172.
105. McCann JR, Bihlmeyer NA, Roche K, Catherine C, Jawahar J, Kwee LC, Younge NE, Silverman J, Ilkayeva O, Sarria C, Zizzi A, Wootton J, Poppe L, Anderson P, Arlotto M, Wei Z, Granek JA, Valdivia RH, David LA, Dressman HK, Newgard CB, Shah SH, Seed PC, Rawls JF, Armstrong SC. **The Pediatric Obesity Microbiome and Metabolism Study (POMMS): Methods, Baseline Data, and Early Insights.** *Obesity (Silver Spring).* 2021 Mar;29(3):569-578.
106. Katsogiannos P, Kamble PG, Pereira MJ, Sundbom M, Carlsson PO, Eriksson JW, Espes D. **Changes in Circulating Cytokines and Adipokines After RYGB in Patients with and without Type 2 Diabetes.** *Obesity (Silver Spring).* 2021 Mar;29(3):535-542.
107. Papachristou S, Pafili K, Papanas N. **Skin AGEs and diabetic neuropathy.** *BMC Endocr Disord.* 2021 Feb 23;21(1):28.
108. Ajabnoor GMA, Bahijri S, Alamoudi AA, Al Raddadi R, Al-Ahmadi J, Jambi H, Borai A, Toumilehto J. **The association between hypertension and other cardiovascular risk factors among non-diabetic Saudis adults-A cross sectional study.** *PLoS One.* 2021 Feb 23;16(2):e0246568.
109. Sha W, Liu M, Sun D, Qiu J, Xu B, Chen L, Shen T, Chen C, Wang H, Zhang C, Lei T. **Resveratrol improves Gly-LDL-induced vascular endothelial cell apoptosis, inflammatory factor secretion and oxidative stress by regulating miR-142-3p and regulating SPRED2-mediated autophagy.** *Aging (Albany NY).* 2021 Feb 17;13. Epub ahead of print.
110. Li FR, Yang HL, Zhou R, Zheng JZ, Chen GC, Zou MC, Wu XX, Wu XB. **Diabetes Duration and Glycemic Control as Predictors of Cardiovascular Disease and Mortality.** *Diabetes Obes Metab.* 2021 Feb 23. Epub ahead of print.

111. Xu YC, Gu Y, Yang JY, Xi K, Tang JC, Bian J, Cai F, Chen L. **RACK1 mediates the advanced glycation end product-induced degradation of HIF-1 α in nucleus pulposus cells via competing with HSP90 for HIF-1 α binding.** *Cell Biol Int.* 2021 Feb 23. Epub ahead of print.
112. Ndjidda Bakari W, Diallo AM, Danwang C, Nzalie RNT, Benoist HM. **Long-term effect of non-surgical periodontal treatment on glycaemic control in patients with diabetes with periodontitis: a systematic review and meta-analysis protocol.** *BMJ Open.* 2021 Feb 22;11(2):e043250.
113. Jardine M, Zhou Z, Lambers Heerspink HJ, Hockham C, Li Q, Agarwal R, Bakris GL, Cannon CP, Charytan DM, Greene T, Levin A, Li JW, Neuen BL, Neal B, Oh R, Oshima M, Pollock C, Wheeler DC, de Zeeuw D, Zhang H, Zinman B, Mahaffey KW, Perkovic V. **Kidney, Cardiovascular, and Safety Outcomes of Canagliflozin according to Baseline Albuminuria: A CREDENCE Secondary Analysis.** *Clin J Am Soc Nephrol.* 2021 Feb 22:CJN.15260920. Epub ahead of print.
114. Almuhanha M, Soong TC, Lee WJ, Chen JC, Wu CC, Lee YC. **Twenty years' experience of laparoscopic 1-anastomosis gastric bypass: surgical risk and long-term results.** *Surg Obes Relat Dis.* 2021 Jan 21:S1550-7289(21)00036-8. Epub ahead of print.
115. Chawla RK, Rao GSNK, Kulandaivelu U, Panda SP, Alavala RR. **A Selective and Sensitive Method Development and Validation of 1,1-Dimethyl-3-Hydroxy-Pyrrolidinium Bromide Impurity in Glycopyrrolate Oral Solution by Liquid Chromatography-Tandem Mass Spectroscopy.** *J Chromatogr Sci.* 2021 Feb 23:bmab003. Epub ahead of print.
116. Pan Y, Li XM, Meng R, Xu BC, Zhang B. **Investigation of the Formation Mechanism and Curcumin Bioaccessibility of Emulsion Gels Based on Sugar Beet Pectin and Laccase Catalysis.** *J Agric Food Chem.* 2021 Mar 3;69(8):2557-2563. Epub 2021 Feb 22.
117. Zeng T, Yuan H, Ren J, Li Y, Hou J, Du L, Zhu J, Chen L, Ji L. **A Pragmatic Study of Basal and Mid-Mixture Insulins as Starter Insulins in Chinese Patients With Type 2 Diabetes: Observations From Long-Term, Real-World Experience.** *Diabetes Ther.* 2021 Feb 22. Epub ahead of print.
118. Shacham EC, Nitzan R, Schwartz N, Ishay A. **Effects of Recommendations for Diabetes Management at Hospital Discharge on Long-Term Diabetes Control.** *Endocr Pract.* 2021 Feb;27(2):118-123. Epub 2020 Dec 16.
119. Cutruzzolà A, Parise M, Scavelli FB, Barone M, Gnasso A, Irace C. **Time in Range Does Not Associate With Carotid Artery Wall Thickness and Endothelial Function in Type 1 Diabetes.** *J Diabetes Sci Technol.* 2021 Feb 22:1932296821993178. Epub ahead of print.
120. Li YY, Yaylayan V, Palin MF, Sullivan B, Fortin F, Cliche S, Sabik H, Gariépy C. **Protective effects of dietary carnosine during in-vitro digestion of pork differing in fat content and cooking conditions.** *J Food Biochem.* 2021 Feb;45(2):e13624.
121. Hepprich M, Zillig D, Florian-Reynoso MA, Donath MY, Rudofsky G. **Switch-to-Semaglutide Study (STS-Study): a Retrospective Cohort Study.** *Diabetes Ther.* 2021 Feb 22. Epub ahead of print.
122. Lin CJ, Lee SL, Kang JW, So PTC, Dong CY. **Multiphoton imaging of the effect of monosaccharide diffusion and formation of fluorescent advanced end products in porcine aorta.** *J Biophotonics.* 2021 Feb 20:e202000439. Epub ahead of print.
123. Elmazoglu Z, Galván-Arzate S, Aschner M, Rangel-López E, Bayraktar O, Santamaría A, Karasu Ç. **Redox-active phytoconstituents ameliorate cell damage and inflammation**

- in rat hippocampal neurons exposed to hyperglycemia+A β ¹⁻⁴² peptide.** *Neurochem Int.* 2021 Feb 19;145:104993. Epub ahead of print.
124. Ruslami R, Koesoemadinata RC, Soetedjo NNM, Imaculata S, Gunawan Y, Permana H, Santoso P, Alisjahbana B, McAllister SM, Grint D, Critchley JA, Hill PC, van Crevel R. **The effect of a structured clinical algorithm on glycemic control in patients with combined tuberculosis and diabetes in Indonesia: A randomized trial.** *Diabetes Res Clin Pract.* 2021 Feb 18;173:108701. Epub ahead of print.
125. Bhatia K, Jain V, Gupta K, Bansal A, Fox A, Qamar A, Damman K, Vaduganathan M. **Prevention of Heart Failure Events with SGLT-2 Inhibitors Across a Spectrum of Cardio-Renal-Metabolic Risk.** *Eur J Heart Fail.* 2021 Feb 20. Epub ahead of print.
126. Lygidakis C, Uwizihwe JP, Bia M, Uwinkindi F, Kallestrup P, Vögele C. **Quality of life among adult patients living with diabetes in Rwanda: a cross-sectional study in outpatient clinics.** *BMJ Open.* 2021 Feb 19;11(2):e043997.
127. Spadaro S, Fogagnolo A, Campo G, Zucchetti O, Verri M, Ottaviani I, Tunstall T, Grasso S, Scaramuzza V, Murgolo F, Marangoni E, Vieceli Dalla Sega F, Fortini F, Pavasini R, Rizzo P, Ferrari R, Papi A, Volta CA, Contoli M. **Markers of endothelial and epithelial pulmonary injury in mechanically ventilated COVID-19 ICU patients.** *Crit Care.* 2021 Feb 19;25(1):74.
128. Lejeune S, Roy C, Slimani A, Pasquet A, Vancraeynest D, Vanoverschelde JL, Gerber BL, Beauloye C, Pouleur AC. **Diabetic phenotype and prognosis of patients with heart failure and preserved ejection fraction in a real life cohort.** *Cardiovasc Diabetol.* 2021 Feb 19;20(1):48.
129. Kotsiou OS, Jagirdar RM, Papazoglou ED, Hatzoglou C, Gourgoulianis KI, Zarogiannis SG. **HMGB1/sRAGE levels differ significantly between transudates and exudates.** *Cytokine.* 2021 Feb 16;141:155469. Epub ahead of print.
130. Ramlagan P, Rondeau P, Neergheen VS, Bourdon E, Bahorun T. **The Prophylactic Activity of *Punica granatum* L. mesocarp Protects Preadipocytes against Ribosylated BSA-Induced Toxicity.** *J Am Coll Nutr.* 2021 Feb 19:1-15. Epub ahead of print.
131. Bast-Pettersen R, Nordby KC, Wastensson G, Aarhus L. **Tremor measurements in a 22-year cohort study of workers exposed to hand-held vibrating tools.** *Int Arch Occup Environ Health.* 2021 Feb 19. Epub ahead of print.
132. Eberle C, Stichling S. **Clinical Improvements by Telemedicine Interventions Managing Type 1 and Type 2 Diabetes: Systematic Meta-review.** *J Med Internet Res.* 2021 Feb 19;23(2):e23244.
133. Lira Neto JCG, Damasceno MMC, Ciol MA, de Freitas RWJF, de Araújo MFM, Teixeira CRS, Carvalho GCN, Lisboa KWSC, Marques RLL, Alencar AMPG, Zanetti ML. **Efficacy of Cinnamon as an Adjuvant in Reducing the Glycemic Biomarkers of Type 2 Diabetes Mellitus: A Three-Month, Randomized, Triple-Blind, Placebo-Controlled Clinical Trial.** *J Am Coll Nutr.* 2021 Feb 19:1-9. Epub ahead of print.
134. Iser BPM, Pinheiro PC, Malta DC, Duncan BB, Schmidt MI. **Prediabetes and intermediate hyperglycemia prevalence in adults and associated factors, Health National Survey.** *Cien Saude Colet.* 2021 Feb;26(2):531-540. Portuguese, English. Epub 2020 Sep 16.
135. Kitamura KI, Hirayama J, Tabuchi Y, Minami T, Matsubara H, Hattori A, Suzuki N. **Glyoxal-induced formation of advanced glycation end products in type 1 collagen**

- decreases both its strength and flexibility in vitro. *J Diabetes Investig.* 2021 Feb 18. Epub ahead of print.
136. Jiang H, Niu F, Zheng Y, Xu Y. **CART mitigates oxidative stress and DNA damage in memory deficits of APP/PS1 mice via upregulating β -amyloid metabolism-associated enzymes.** *Mol Med Rep.* 2021 Apr;23(4):1-12. Epub 2021 Feb 19.
 137. Bai Y, Bao X, Mu Q, Fang X, Zhu R, Liu C, Mo F, Zhang D, Jiang G, Li P, Gao S, Zhao D. **Ginsenoside Rb1, salvianolic acid B and their combination modulate gut microbiota and improve glucolipid metabolism in high-fat diet induced obese mice.** *PeerJ.* 2021 Feb 3;9:e10598.
 138. Olaru OG, Constantin GI, Pena CM. **Correlations of sialic acid with glycated hemoglobin A1c and glycemia in postmenopausal women with type-2 diabetes mellitus.** *Exp Ther Med.* 2021 Mar;21(3):286. Epub 2021 Jan 26.
 139. Zaharescu A, Mârțu I, Luchian AI, Mârțu MA, Șufaru IG, Mârțu C, Solomon SM. **Role of adjunctive therapy with subantimicrobial doses of doxycycline in glycemic control (HbA1c) in patients with diabetes and endo-periodontal lesions to prevent sinus complications.** *Exp Ther Med.* 2021 Mar;21(3):277. Epub 2021 Jan 25.
 140. Hou J, Zhou X, Wang P, Zhao C, Qin Y, Liu F, Yu L, Xu H. **An Integrative Pharmacology-Based Approach for Evaluating the Potential Effects of Purslane Seed in Diabetes Mellitus Treatment Using UHPLC-LTQ-Orbitrap and TCMIP V2.0.** *Front Pharmacol.* 2021 Feb 2;11:593693.
 141. Calzetta L, Coppola A, Ritondo BL, Matino M, Chetta A, Rogliani P. **The Impact of Muscarinic Receptor Antagonists on Airway Inflammation: A Systematic Review.** *Int J Chron Obstruct Pulmon Dis.* 2021 Feb 12;16:257-279.
 142. Baber U, Azzalini L, Masoomi R, Johal G, Barman N, Sweeny J, Krishnan P, Dangas G, Vijay P, Jahveri VB, Mehran R, Fuster V, Kini AS, Sharma SK. **Hemoglobin A_{1c} and Cardiovascular Outcomes Following Percutaneous Coronary Intervention: Insights From a Large Single-Center Registry.** *JACC Cardiovasc Interv.* 2021 Feb 22;14(4):388-397.
 143. Chellappa RC, Palanisamy R, Swaminathan K. **Rage Isoforms, its Ligands and their Role in Pathophysiology of Alzheimer's Disease.** *Curr Alzheimer Res.* 2021 Feb 18. Epub ahead of print.
 144. Hagen JM, Sutterland AL, Liefers T, Schirmbeck F, Cohn DM, Lok A, Tan HL, Zwinderman AH, de Haan L. **Skin autofluorescence of advanced glycation end products and mortality in affective disorders in the lifelines cohort study: A mediation analysis.** *J Affect Disord.* 2021 Mar 1;282:1082-1089. Epub 2021 Jan 6.
 145. Ni M, Song X, Pan J, Gong D, Zhang G. **Vitexin Inhibits Protein Glycation through Structural Protection, Methylglyoxal Trapping, and Alteration of Glycation Site.** *J Agric Food Chem.* 2021 Mar 3;69(8):2462-2476. Epub 2021 Feb 18.
 146. Hropot Plesko N, Skaleric E, Seme K, Janez A, Skaleric U, Gaspirc B. **Effect of Full-mouth Disinfection Protocol on Glycaemic Control and Subgingival Microbiota in Patients with Type 1 and Type 2 Diabetes.** *Oral Health Prev Dent.* 2021 Jan 7;19(1):121-128.
 147. Zubkiewicz-Kucharska A, Seifert M, Stepkowski M, Noczyńska A. **Diagnosis of type 1 diabetes during the SARS-CoV-2 pandemic: Does lockdown affect the incidence and clinical status of patients?** *Adv Clin Exp Med.* 2021 Feb;30(2):127-134.
 148. Raita Y, Zhu Z, Freishtat RJ, Fujiogi M, Liang L, Patregnani JT, Camargo CA, Hasegawa K. **Soluble receptor for advanced glycation end products (sRAGE) and asthma:**

- Mendelian randomisation study.** *Pediatr Allergy Immunol.* 2021 Feb 18. Epub ahead of print.
149. Nagai Y, Kazumori K, Takeshima T, Iwasaki K, Tanaka Y. **Effects of Increasing Metformin Dose vs Adding/Switching to Dipeptidyl Peptidase-4 Inhibitors on Glycemic Control in Patients with Type 2 Diabetes.** *Diabetes Ther.* 2021 Feb 17. Epub ahead of print.
 150. Cevallos L, Rodríguez FM, Herrera A, Sepúlveda EM, Donatini G, Guilbert L, Zerrweck C. **Metabolic Surgery and Class 1 Obesity (<math>²</math>): a Prospective Study with Short-, Mid-, and Long-term Results Among Latinos.** *Obes Surg.* 2021 Feb 17. Epub ahead of print.
 151. Babaya N, Noso S, Hiromine Y, Taketomo Y, Niwano F, Yoshida S, Yasutake S, Kawabata Y, Ikegami H. **Relationship of continuous glucose monitoring-related metrics with HbA1c and residual β -cell function in Japanese patients with type 1 diabetes.** *Sci Rep.* 2021 Feb 17;11(1):4006.
 152. Saber AM, Mohamed MA, Sadek AA, Mahmoud RA. **Role of umbilical cord C-peptide levels in early prediction of hypoglycemia in infants of diabetic mothers.** *BMC Pediatr.* 2021 Feb 17;21(1):85.
 153. Kaur H. **Stability testing in monoclonal antibodies.** *Crit Rev Biotechnol.* 2021 Feb 17:1-32. Epub ahead of print.
 154. Tashiro K, Soutome S, Funahara M, Kawashita Y, Kitamura M, Fukuda H, Furugen R, Iwasaki T, Hayashida H, Kawasaki K, Higashi M, Nagayoshi M, Takamura N, Maeda T, Saito T. **The Relationship between Dental Findings and Tongue Pressure: A Survey of 745 Community-Dwelling Adults and Elderly Persons in Japan.** *Gerontology.* 2021 Feb 17:1-8. Epub ahead of print.
 155. Jiang J, Zhang Y, Chen J, Yang X, Mei C, Xiong F, Shi W, Zhou W, Liu X, Sun S, Zhang P, Zhang Y, Zhang Y, Liu S, Zhang Z, Lin Q, Yu Y, Tian J, Luo W, Qin X, Hou FF. **Serum and Tissue Levels of Advanced Glycation End Products and Risk of Mortality in Patients on Maintenance Hemodialysis.** *Am J Nephrol.* 2021 Feb 17:1-9. Epub ahead of print.
 156. Cipryan L, Dostal T, Plews DJ, Hofmann P, Laursen PB. **Adiponectin/leptin ratio increases after a 12-week very low-carbohydrate, high-fat diet, and exercise training in healthy individuals: A non-randomized, parallel design study.** *Nutr Res.* 2021 Mar;87:22-30. Epub 2020 Dec 10.
 157. Li GY, Li HY, Li Q. **Use of glycated albumin for the identification of diabetes in subjects from northeast China.** *World J Diabetes.* 2021 Feb 15;12(2):149-157.
 158. Nadali M, Lyngfelt L, Erlandsson MC, Silfverswärd ST, Andersson KME, Bokarewa MI, Pullerits R. **Low Soluble Receptor for Advanced Glycation End Products Precedes and Predicts Cardiometabolic Events in Women With Rheumatoid Arthritis.** *Front Med (Lausanne).* 2021 Jan 28;7:594622.
 159. Rouf S, Rbiai N, Baibai K, Berrich J, Bouchentouf T, Rahmoun M, Abda N, Latrech H. **Feasibility and Efficiency of a Novel Bolus Calculator (IF-DIABETE) for Patients With Type 1 Diabetes: A Nonrandomized Single-Arm Pilot Study.** *Cureus.* 2021 Jan 12;13(1):e12646.
 160. Silva CFM, Saunders C, Peres W, Folino B, Kamel T, Dos Santos MS, Padilha P. **Effect of ultra-processed foods consumption on glycemic control and gestational weight gain in pregnant with pregestational diabetes mellitus using carbohydrate counting.** *PeerJ.* 2021 Feb 1;9:e10514.

161. Kumah E, Abuosi AA, Ankomah SE, Anaba C. **Self-management Education Program: The Case of Glycemic Control of Type 2 Diabetes.** *Oman Med J.* 2021 Jan 31;36(1):e225.
162. Al-Kafaji G, Al-Muhtaresh HA, Salem AH. **Expression and clinical significance of miR-1 and miR-133 in pre-diabetes.** *Biomed Rep.* 2021 Mar;14(3):33. Epub 2021 Feb 3.
163. Liang Y, Song P, Chen W, Xie X, Luo R, Su J, Zhu Y, Xu J, Liu R, Zhu P, Zhang Y, Huang M. **Inhibition of Caspase-1 Ameliorates Ischemia-Associated Blood-Brain Barrier Dysfunction and Integrity by Suppressing Pyroptosis Activation.** *Front Cell Neurosci.* 2021 Jan 11;14:540669.
164. Wang R, Yu X, Gkousioudi A, Zhang Y. **Effect of Glycation on Interlamellar Bonding of Arterial Elastin.** *Exp Mech.* 2021 Jan;61(1):81-94. Epub 2020 Jul 29.
165. Jimenez AG. **Plasma Concentration of Advanced Glycation End-Products From Wild Canids and Domestic Dogs Does Not Change With Age or Across Body Masses.** *Front Vet Sci.* 2021 Jan 26;8:637132.
166. Liang Y, Chen M, Tan C, Tu C, Zheng X, Liu J. **Successful Sequential Treatment for Severe Asthma Coexisting COVID-19 via Budesonide/Glycopyrrolate/Formoterol Fumarate.** *Int J Gen Med.* 2021 Feb 4;14:357-359.
167. Eberle C, Stichling S. **Effect of Telemetric Interventions on Glycated Hemoglobin A1c and Management of Type 2 Diabetes Mellitus: Systematic Meta-Review.** *J Med Internet Res.* 2021 Feb 17;23(2):e23252.
168. Gudban N, Yehuda I, Nasir W, Soboh S, Tamir S, Blum A. **Effect of Telemedicine Dietary Intervention for Endothelial Function in Patients with Type 2 Diabetes Mellitus on Mediterranean Diet.** *Isr Med Assoc J.* 2021 Feb;23(2):89-93.
169. Lingvay I, Kirk AR, Lophaven S, Wolden ML, Shubrook JH. **Outcomes in GLP-1 RA-Experienced Patients Switching to Once-Weekly Semaglutide in a Real-World Setting: The Retrospective, Observational EXPERT Study.** *Diabetes Ther.* 2021 Feb 17. Epub ahead of print.
170. Guo S, Xu Y, Qin J, Chen Y, You Y, Tao J, Liu Z, Huang J. **Effect of tai chi on glycaemic control, lipid metabolism and body composition in adults with type 2 diabetes: a meta-analysis and systematic review.** *J Rehabil Med.* 2021 Feb 17. Epub ahead of print.
171. Butler J, Bjurstrom M, Marceau A. **Possible dulaglutide-associated cholecystitis with safe continuation post cholecystectomy.** *Am J Health Syst Pharm.* 2021 Feb 17:zxab045. Epub ahead of print.
172. Vargas-Vázquez A, Bello-Chavolla OY, Ortiz-Brizuela E, Campos-Muñoz A, Mehta R, Villanueva-Reza M, Bahena-López JP, Antonio-Villa NE, González-Lara MF, Ponce de León A, Sifuentes-Osornio J, Aguilar-Salinas CA. **Impact of undiagnosed type 2 diabetes and pre-diabetes on severity and mortality for SARS-CoV-2 infection.** *BMJ Open Diabetes Res Care.* 2021 Feb;9(1):e002026.
173. Martínez-Ubieto J, Aragón-Benedí C, de Pedro J, Cea-Calvo L, Morell A, Jiang Y, Cedillo S, Ramírez-Boix P, Pascual-Bellosta AM. **Economic impact of improving patient safety using Sugammadex for routine reversal of neuromuscular blockade in Spain.** *BMC Anesthesiol.* 2021 Feb 16;21(1):55.
174. Li T, Li H, Wu Y, Wu Q, Zhao G, Cai Z, Pu F, Li B. **Efficacy and safety of Shenqi Jiangtang Granules plus oral hypoglycemic agent in patients with type 2 diabetes mellitus: A protocol for systematic review and meta-analysis of 15 RCTs.** *Medicine (Baltimore).* 2021 Feb 5;100(5):e23578.

175. Zhang S, Huang F, Xu R, Cheng A, Wan Z, Lv Y, Liu Q. **Association between body mass index and cardio-metabolic risk factors among subjects in Wuhan, China: A cross-sectional study.** *Medicine (Baltimore)*. 2021 Feb 5;100(5):e23371.
176. Helgeland E, Rashad A, Campodoni E, Goksoyr O, Pedersen TØ, Sandri M, Rosén A, Mustafa K. **Dual-crosslinked 3D printed gelatin scaffolds with potential for temporomandibular joint cartilage regeneration.** *Biomed Mater*. 2021 Feb 16. Epub ahead of print.
177. Ali Abdelhamid Y, Bernjak A, Phillips LK, Summers MJ, Weinel LM, Lange K, Chow E, Kar P, Horowitz M, Heller S, Deane AM. **Nocturnal Hypoglycemia in Patients With Diabetes Discharged From ICUs: A Prospective Two-Center Cohort Study.** *Crit Care Med*. 2021 Feb 12. Epub ahead of print.
178. Zhao P, Gunawardena HP, Zhong X, Zare RN, Chen H. **Microdroplet Ultrafast Reactions Speed Antibody Characterization.** *Anal Chem*. 2021 Mar 2;93(8):3997-4005. Epub 2021 Feb 16.
179. Silva WA, Almeida-Pititto B, Santos RB, Aiello AN, Giatti S, Parise BK, Souza SP, Vivolo SF, Lotufo PA, Bensenor IM, Drager LF. **Obstructive sleep apnea is associated with lower adiponectin and higher cholesterol levels independently of traditional factors and other sleep disorders in middle-aged adults: the ELSA-Brasil cohort.** *Sleep Breath*. 2021 Feb 15. Epub ahead of print.
180. Lu P, Xiao S, Chen S, Fu Y, Zhang P, Yao Y, Chen F. **LncRNA SNHG12 downregulates RAGE to attenuate hypoxia-reoxygenation-induced apoptosis in H9c2 cells.** *Biosci Biotechnol Biochem*. 2021 Feb 3:zbaa090. Epub ahead of print.
181. Vasudevan V, Agnihotri P, Biswas S. **Post Translational Modification and its pathologic association in Rheumatoid Arthritis: A brief perspective.** *Curr Protein Pept Sci*. 2021 Feb 15. Epub ahead of print.
182. Kaikini AA, Muke S, Peshattiwar V, Bagle S, Dighe V, Sathaye S. **Ethyl ferulate, a lipophilic phenylpropanoid, prevents diabetes-associated renal injury in rats by amelioration of hyperglycemia-induced oxidative stress via activation of nuclear factor erythroid 2-related factor 2.** *J Food Biochem*. 2021 Feb 15:e13607. Epub ahead of print.
183. Liu CF, Chen SC, Chen KJ, Liu L, Chen YP, Kang EY, Liu PK, Yeung L, Wu WC, Lai CC, Lo FS, Wang NK. **Higher HbA1c may reduce axial length elongation in myopic children: a comparison cohort study.** *Acta Diabetol*. 2021 Feb 15. Epub ahead of print.
184. Eberle C, Löhnert M, Stichling S. **Effectiveness of Disease-Specific mHealth Apps in Patients With Diabetes Mellitus: Scoping Review.** *JMIR Mhealth Uhealth*. 2021 Feb 15;9(2):e23477.
185. Dai S, Meng X, Cai X, Yuan C, Zhao Z, Zhong L, Shi Y, Yin F. **Therapeutic effect of ursolic acid on fetal development in pregnant rats with gestational diabetes mellitus via AGEs-RAGE signaling pathway.** *J Food Biochem*. 2021 Feb 15:e13651. Epub ahead of print.
186. Neta JFF, Veras VS, Sousa DF, Cunha MDCDSO, Queiroz MVO, Neto JCGL, Damasceno MMC, Araújo MFM, Freitas RWJF. **Effectiveness of the piperine-supplemented *Curcuma longa* L. in metabolic control of patients with type 2 diabetes: a randomised double-blind placebo-controlled clinical trial.** *Int J Food Sci Nutr*. 2021 Feb 14:1-10. Epub ahead of print.

187. Lou J, Wang Y, Li L, Zeng D. **Learning latent heterogeneity for type 2 diabetes patients using longitudinal health markers in electronic health records.** *Stat Med.* 2021 Feb 15. Epub ahead of print.
188. Fujikawa T, Ohara M, Kohata Y, Nagaike H, Fukase A, Osaka N, Yashima H, Sato N, Kushima H, Shinmura K, Takahashi Y, Hiromura M, Terasaki M, Mori Y, Fukui T, Matsui T, Hirano T, Yamagishi SI. **Glucose Variability is Independently Correlated with Serum Level of Pigment Epithelium-Derived Factor in Type 2 Diabetes.** *Diabetes Ther.* 2021 Feb 13. Epub ahead of print.
189. Michael T, Paul C. **A new medication, a new toxidrome - A case report of anticholinergic wipe toxicity due to improper medication use.** *Am J Emerg Med.* 2021 Jan 29:S0735-6757(21)00063-2. Epub ahead of print.
190. Liu CM, Chen SH, Liao YW, Yu CH, Yu CC, Hsieh PL. **Magnolol ameliorates the accumulation of reactive oxidative stress and inflammation in diabetic periodontitis.** *J Formos Med Assoc.* 2021 Feb 10:S0929-6646(21)00027-9. Epub ahead of print.
191. Sousa-Uva M, Barreto M, Roquette R, Matias-Dias C, Ribeiro R, Manuel Boavida J, Nunes B. **Association between area- and individual-level socio- economic factors with glycated haemoglobin-Evidence from a Portuguese population-based study.** *Diabet Med.* 2021 Feb 12:e14542. Epub ahead of print.
192. Fuchs J, Allen JM, Boughton CK, Wilinska ME, Thankamony A, de Beaufort C, Campbell F, Yong J, Froehlich-Reiterer E, Mader JK, Hofer SE, Kapellen TM, Rami-Merhar B, Tauschmann M, Hood K, Kimbell B, Lawton J, Roze S, Sibayan J, Cohen N, Hovorka R; KidsAP Consortium. **Assessing the efficacy, safety and utility of closed-loop insulin delivery compared with sensor-augmented pump therapy in very young children with type 1 diabetes (KidsAP02 study): an open-label, multicentre, multinational, randomised cross-over study protocol.** *BMJ Open.* 2021 Feb 12;11(2):e042790.
193. Kawata Y, Hirano H, Takahashi R, Miyano Y, Kimura A, Sato N, Morita Y, Kimura H, Fujita K. **Detailed Structure and Pathophysiological Roles of the IgA- Albumin Complex in Multiple Myeloma.** *Int J Mol Sci.* 2021 Feb 10;22(4):1766.
194. Guo Y, Sun J, Zhang R, Yang P, Zhang S, Wu Z. **Salvia miltiorrhiza improves type 2 diabetes: A protocol for systematic review and meta-analysis.** *Medicine (Baltimore).* 2021 Feb 12;100(6):e23843.
195. Xia X, Wang X, Wang H, Lin Z, Shao K, Xu J, Zhao Y. **Ameliorative effect of white tea from 50-year-old tree of Camellia sinensis L. (Theaceae) on kidney damage in diabetic mice via SIRT1/AMPK pathway.** *J Ethnopharmacol.* 2021 Feb 9;272:113919. Epub ahead of print.
196. Ohira H, Tsuruya A, Oikawa D, Nakagawa W, Mamoto R, Hattori M, Waki T, Takahashi S, Fujioka Y, Nakayama T. **Alteration of oxidative-stress and related marker levels in mouse colonic tissues and fecal microbiota structures with chronic ethanol administration: Implications for the pathogenesis of ethanol- related colorectal cancer.** *PLoS One.* 2021 Feb 12;16(2):e0246580.
197. Ansari DM, Harahwa T, Abuelgasim E, Harky A. **Glycated Haemoglobin Levels and Its Effect on Outcomes in Cardiac Surgery.** *Braz J Cardiovasc Surg.* 2021 Feb 1. Epub ahead of print.
198. Persano M, Nollino L, Sambataro M, Rigato M, Negro I, Marchetto S, Paccagnella A. **Real-world study on the effectiveness and safety of basal insulin IDegLira in type 2 diabetic patients previously treated with multi-injective insulin therapy.** *Eur Rev Med Pharmacol Sci.* 2021 Jan;25(2):923-931.

199. Qu Y, Wang K, Lin S, Cao L, Xu Z. **Efficacy and safety of glucokinase activators for type 2 diabetes mellitus therapy: a meta-analysis of double-blind randomized controlled trials.** *Eur Rev Med Pharmacol Sci.* 2021 Jan;25(2):914-922.
200. Dhumad MM, Hamdan FB, Khudhair MS, Al-Matubsi HY. **Correlation of staging and risk factors with cardiovascular autonomic neuropathy in patients with type II diabetes mellitus.** *Sci Rep.* 2021 Feb 11;11(1):3576.
201. Lau LHY, Nano J, Cecil A, Schederecker F, Rathmann W, Prehn C, Zeller T, Lechner A, Adamski J, Peters A, Thorand B. **Cross-sectional and prospective relationships of endogenous progestogens and estrogens with glucose metabolism in men and women: a KORA F4/FF4 Study.** *BMJ Open Diabetes Res Care.* 2021 Feb;9(1):e001951.
202. Hussein SH, Albatineh AN, Almajran A, Ziyab AH. **Association of health literacy and other risk factors with glycemic control among patients with type 2 diabetes in Kuwait: A cross-sectional study.** *Prim Care Diabetes.* 2021 Feb 8:S1751-9918(21)00011-5. Epub ahead of print.
203. Papazoglou AS, Kartas A, Samaras A, Vouloagkas I, Vrana E, Moysidis DV, Akrivos E, Kotzampasis G, Baroutidou A, Papanastasiou A, Liampas E, Botis M, Karagiannidis E, Stalikas N, Karvounis H, Tzikas A, Giannakoulas G. **Prognostic significance of diabetes mellitus in patients with atrial fibrillation.** *Cardiovasc Diabetol.* 2021 Feb 11;20(1):40.
204. Pérez-Galarza J, Prócel C, Cañadas C, Aguirre D, Pibaque R, Bedón R, Sempértegui F, Drexhage H, Baldeón L. **Immune Response to SARS-CoV-2 Infection in Obesity and T2D: Literature Review.** *Vaccines (Basel).* 2021 Jan 29;9(2):102.
205. Hatada M, Loew N, Okuda-Shimazaki J, Khanwalker M, Tsugawa W, Mulchandani A, Sode K. **Development of an Interdigitated Electrode-Based Disposable Enzyme Sensor Strip for Glycated Albumin Measurement.** *Molecules.* 2021 Jan 31;26(3):734.
206. Kutzli I, Weiss J, Gibis M. **Glycation of Plant Proteins Via Maillard Reaction: Reaction Chemistry, Technofunctional Properties, and Potential Food Application.** *Foods.* 2021 Feb 9;10(2):376.
207. Zhu S, Meehan T, Veerasingham M, Sivanesan K. **COVID-19 pandemic gestational diabetes screening guidelines: A retrospective study in Australian women.** *Diabetes Metab Syndr.* 2021 Jan-Feb;15(1):391-395. Epub 2021 Feb 4.
208. Kamynina A, Esteras N, Koroev DO, Angelova PR, Volpina OM, Abramov AY. **Activation of RAGE leads to the release of glutamate from astrocytes and stimulates calcium signal in neurons.** *J Cell Physiol.* 2021 Feb 11. Epub ahead of print.
209. Chen L, Xing Q, Li J, Zhou J, Yuan Y, Wan Y, Pflug BK, Strauss KW, Hirsch LJ. **Injection Technique Education in Patients with Diabetes Injecting Insulin into Areas of Lipohypertrophy: A Randomized Controlled Trial.** *Diabetes Ther.* 2021 Feb 11. Epub ahead of print.
210. Bigot-Corbel E, Lanore A, Raulet C, Delorme C, Azulay JP, Lehmann S, Beaudeau JL, Beauvieux MC, Sapin V, Peoc'h K, Rucheton B. **SARS-CoV-2 et atteintes neurologiques: quelle est la place des biomarqueurs? [SARS-CoV-2 and neurological disorders: the relevance of biomarkers?].** *Ann Biol Clin (Paris).* 2021 Feb 1;79(1):7-16. French.
211. Rungratanawanich W, Qu Y, Wang X, Essa MM, Song BJ. **Advanced glycation end products (AGEs) and other adducts in aging-related diseases and alcohol-mediated tissue injury.** *Exp Mol Med.* 2021 Feb;53(2):168-188. Epub 2021 Feb 10.
212. Yao J, Zhang C, Yang Y, Fang X, Chen Q, Zhong G. **Comparative transcriptomic analysis revealed novel potential therapeutic targets of traditional Chinese medicine**

- (Pinggan-Qianyang decoction) on vascular remodeling in spontaneously hypertensive rats. *Chin Med.* 2021 Feb 10;16(1):21.
213. Nordin N, Hairon SM, Yaacob NM, Hamid AA, Isa SAM, Hassan N. **Perceived quality of care among people with type 2 diabetes mellitus in the north east region of peninsular Malaysia.** *BMC Public Health.* 2021 Feb 2;21(1):268.
214. El-Bidawy MH, Omar Hussain AB, Al-Ghamdi S, Aldossari KK, Haidara MA, Al-Ani B. **Resveratrol ameliorates type 2 diabetes mellitus-induced alterations to the knee joint articular cartilage ultrastructure in rats.** *Ultrastruct Pathol.* 2021 Feb 11:1-10. Epub ahead of print. P
215. Zielińska D, Zieliński H, Laparra-Llopis JM, Szawara-Nowak D, Honke J, Giménez-Bastida JA. **Caffeic Acid Modulates Processes Associated with Intestinal Inflammation.** *Nutrients.* 2021 Feb 8;13(2):554.
216. Arthur RS, Dannenberg AJ, Rohan TE. **The association of prediagnostic circulating levels of cardiometabolic markers, testosterone and sex hormone-binding globulin with risk of breast cancer among normal weight postmenopausal women in the UK Biobank.** *Int J Cancer.* 2021 Feb 10. Epub ahead of print.
217. Nelinson DS, Sosa JM, Chilton RJ. **SGLT2 inhibitors: a narrative review of efficacy and safety.** *J Am Osteopath Assoc.* 2021 Feb 1;121(2):229-239.
218. Ahmad E, Waller HL, Sargeant JA, Webb MA, Htike ZZ, McCann GP, Gulsin G, Khunti K, Yates T, Henson J, Davies MJ, Webb DR. **Effects of liraglutide versus sitagliptin on circulating cardiovascular biomarkers, including circulating progenitor cells, in individuals with type 2 diabetes and obesity: Analyses from the LYDIA trial.** *Diabetes Obes Metab.* 2021 Feb 10. Epub ahead of print.
219. Seino Y, Kaku K, Kadowaki T, Okamoto T, Sato A, Shirakawa M, O'Neill EA, Engel SS, Kaufman KD. **A randomized, placebo-controlled trial to assess the efficacy and safety of sitagliptin in Japanese patients with type 2 diabetes and inadequate glycaemic control on ipragliflozin.** *Diabetes Obes Metab.* 2021 Feb 10. Epub ahead of print.
220. Yepuri G, Shekhtman A, Marie Schmidt A, Ramasamy R. **Heme & RAGE: A new opportunistic relationship?** *FEBS J.* 2021 Feb 10. Epub ahead of print.
221. Williams DM, Ruslan AM, Khan R, Vijayasingam D, Iqbal F, Shaikh A, Lim J, Chudleigh R, Peter R, Udiawar M, Bain SC, Stephens JW, Min T. **Real-World Clinical Experience of Semaglutide in Secondary Care Diabetes: A Retrospective Observational Study.** *Diabetes Ther.* 2021 Feb 9:1–11. Epub ahead of print.
222. Wanner C, Cooper ME, Johansen OE, Toto R, Rosenstock J, McGuire DK, Kahn SE, Pfarr E, Schnaidt S, von Eynatten M, George JT, Gollop ND, Marx N, Alexander JH, Zinman B, Perkovic V; CARMELINA investigators. **Effect of linagliptin versus placebo on cardiovascular and kidney outcomes in nephrotic-range proteinuria and type 2 diabetes: the CARMELINA randomized controlled trial.** *Clin Kidney J.* 2021 Jan 17;14(1):226-236.
223. Lukenbill T, Giovanni CS, Simpson A, Chew M, Basco W, Roberts J. **Assessing anthropometric and laboratory outcomes of a paediatric telehealth weight management program.** *J Telemed Telecare.* 2021 Feb 9:1357633X20986022. Epub ahead of print.
224. Sanghvi VR, Mohan P, Singh K, Cao L, Berishaj M, Wolfe AL, Schatz JH, Lailier N, de Stanchina E, Viale A, Wendel HG. **NRF2 Activation Confers Resistance to eIF4A Inhibitors in Cancer Therapy.** *Cancers (Basel).* 2021 Feb 5;13(4):639.

225. Vazquez-Jimenez JG, Corpus-Navarro MS, Rodriguez-Chavez JM, Jaramillo-Ramirez HJ, Hernandez-Aranda J, Galindo-Hernandez O, Machado-Contreras JR, Trejo-Trejo M, Guerrero-Hernandez A, Olivares-Reyes JA. **The Increased Expression of Regulator of G-Protein Signaling 2 (RGS2) Inhibits Insulin-Induced Akt Phosphorylation and Is Associated with Uncontrolled Glycemia in Patients with Type 2 Diabetes.** *Metabolites*. 2021 Feb 5;11(2):91.
226. Anton DM, Martu MA, Maris M, Maftai GA, Sufaru IG, Tatarciuc D, Luchian I, Ioanid N, Martu S. **Study on the Effects of Melatonin on Glycemic Control and Periodontal Parameters in Patients with Type II Diabetes Mellitus and Periodontal Disease.** *Medicina (Kaunas)*. 2021 Feb 5;57(2):140.
227. Seynnaeve D, Mulvihill DP, Winderickx J, Franssens V. **Yeasts as Complementary Model Systems for the Study of the Pathological Repercussions of Enhanced Synphilin-1 Glycation and Oxidation.** *Int J Mol Sci*. 2021 Feb 7;22(4):1677.
228. Kosmachevskaya OV, Novikova NN, Topunov AF. **Carbonyl Stress in Red Blood Cells and Hemoglobin.** *Antioxidants (Basel)*. 2021 Feb 7;10(2):253.
229. Bharmal SH, Cho J, C Alarcon Ramos G, Ko J, Cameron-Smith D, Petrov MS. **Acute Nutritional Ketosis and Its Implications for Plasma Glucose and Glucoregulatory Peptides in Adults with Prediabetes: A Crossover Placebo- Controlled Randomized Trial.** *J Nutr*. 2021 Feb 9:nxaa417. Epub ahead of print.
230. Cheng W, Wang X, Zhang Z, Ma L, Liu G, Wang Q, Chen F, Cheng KW. **Development of an Isotope Dilution UHPLC-QqQ-MS/MS-Based Method for Simultaneous Determination of Typical Advanced Glycation End Products and Acrylamide in Baked and Fried Foods.** *J Agric Food Chem*. 2021 Mar 3;69(8):2611-2618. Epub 2021 Feb 9.
231. Kaneko S, da Rocha Fernandes JD, Yamamoto Y, Langer J, Faurby M. **A Japanese Study Assessing Glycemic Control with Use of IDegAsp Co-formulation in Patients with Type 2 Diabetes in Clinical Practice: The JAGUAR Study.** *Adv Ther*. 2021 Mar;38(3):1638-1649. Epub 2021 Feb 9.
232. Teodorowicz M, Zenker HE, Ewaz A, Tsallis T, Mauser A, Gensberger-Reigl S, De Jong NW, Hettinga KA, Wichers HJ, van Neerven RJJ, Savelkoul HFJ. **Enhanced uptake of processed bovine β -lactoglobulin by antigen presenting cells: Identification of receptors and implications for allergenicity.** *Mol Nutr Food Res*. 2021 Feb 9:e2000834. Epub ahead of print.
233. Muoio MG, Talia M, Lappano R, Sims AH, Vella V, Cirillo F, Manzella L, Giuliano M, Maggiolini M, Belfiore A, De Francesco EM. **Activation of the S100A7/RAGE Pathway by IGF-1 Contributes to Angiogenesis in Breast Cancer.** *Cancers (Basel)*. 2021 Feb 4;13(4):621.
234. Baum P, Koj S, Klötting N, Blüher M, Classen J, Paeschke S, Gericke M, Toyka KV, Nowicki M, Kosacka J. **Treatment-Induced Neuropathy in Diabetes (TIND)-Developing a Disease Model in Type 1 Diabetic Rats.** *Int J Mol Sci*. 2021 Feb 4;22(4):1571.
235. Rooney MR, Rawlings AM, Pankow JS, Echouffo Tcheguigui JB, Coresh J, Sharrett AR, Selvin E. **Risk of Progression to Diabetes Among Older Adults With Prediabetes.** *JAMA Intern Med*. 2021 Feb 8:e208774. Epub ahead of print.
236. He D, Kuang W, Yang X, Xu M. **Association of hemoglobin H (HbH) disease with hemoglobin A1c and glycated albumin in diabetic and non-diabetic patients.** *Clin Chem Lab Med*. 2021 Jan 13:cclm-2020-1563. Epub ahead of print.

237. Mir AR, Habib S, Uddin M. **Recent Advances in Histone Glycation: Emerging role in Diabetes and Cancer.** *Glycobiology*. 2021 Feb 6:cwab011. Epub ahead of print.
238. Nakano T, Kono M, Segawa K, Kurosaka S, Nakaoka Y, Morimoto Y, Mitani T. **Effects of exposure to methylglyoxal on sperm motility and embryonic development after fertilization in mice.** *J Reprod Dev*. 2021 Feb 6. Epub ahead of print.
239. Suvarna R, Shenoy RP, Hadapad BS, Nayak AV. **Effectiveness of polyherbal formulations for the treatment of type 2 Diabetes mellitus - A systematic review and meta-analysis.** *J Ayurveda Integr Med*. 2021 Feb 4:S0975-9476(20)30105-4. Epub ahead of print.
240. Fu CP, Lee CL, Li YH, Lin SY. **Metformin as a potential protective therapy against tuberculosis in patients with diabetes mellitus: A retrospective cohort study in a single teaching hospital.** *J Diabetes Investig*. 2021 Feb 7. Epub ahead of print.
241. Fadini GP, Disoteco O, Candido R, Di Bartolo P, Laviola L, Consoli A. **Delphi-Based Consensus on Treatment Intensification in Type 2 Diabetes Subjects Failing Basal Insulin Supported Oral Treatment: Focus on Basal Insulin + GLP-1 Receptor Agonist Combination Therapies.** *Diabetes Ther*. 2021 Feb 7. Epub ahead of print.
242. van Berckel MMG, van Loon SLM, Boer AK, Scharnhorst V, Nienhuijs SW. **Visual Analysis of Biomarkers Reveals Differences in Lipid Profiles and Liver Enzymes before and after Gastric Sleeve and Bypass.** *Obes Facts*. 2021 Feb 5:1-11. Epub ahead of print.
243. Domingues R, Pereira C, Cruz MT, Silva A. **Therapies for Alzheimer's disease: a metabolic perspective.** *Mol Genet Metab*. 2021 Jan 27:S1096-7192(21)00012-3. Epub ahead of print.
244. Tsujimoto T, Kajio H. **Four-Year Screening Interval and Vision-Threatening Retinopathy in Type 2 Diabetes Patients With Good Glycemic Control.** *Mayo Clin Proc*. 2021 Feb;96(2):322-331.
245. Sanyal D, Majumder A, Ghosh S, Pandit K. **Real world study of short term efficacy, safety, and tolerability of canagliflozin 100 mg initiation in type 2 diabetes mellitus patients during hot humid Indian summer.** *Diabetes Metab Syndr*. 2021 Jan-Feb;15(1):385-389. Epub 2021 Jan 22.
246. Li J, Wang K, Huang B, Li R, Wang X, Zhang H, Tang H, Chen X. **The receptor for advanced glycation end products mediates dysfunction of airway epithelial barrier in a lipopolysaccharides-induced murine acute lung injury model.** *Int Immunopharmacol*. 2021 Feb 3;93:107419. Epub ahead of print.
247. Chen Q, Wu Y, Yu Y, Wei J, Huang W. **Rho-kinase inhibitor hydroxyfasudil protects against HIV-1 Tat-induced dysfunction of tight junction and neprilysin/A β transfer receptor expression in mouse brain microvessels.** *Mol Cell Biochem*. 2021 Feb 6. Epub ahead of print.
248. Shah SZA, Karam JA, Zeb A, Ullah R, Shah A, Haq IU, Ali I, Darain H, Chen H. **Movement is Improvement: The Therapeutic Effects of Exercise and General Physical Activity on Glycemic Control in Patients with Type 2 Diabetes Mellitus: A Systematic Review and Meta-Analysis of Randomized Controlled Trials.** *Diabetes Ther*. 2021 Feb 5. Epub ahead of print.
249. Liang Y, Meng H, Li R, Yang J, Jia J, Hou Y. **A randomized controlled trial protocol of the cardiovascular safety and efficacy of liraglutide in the treatment of type 2 diabetes.** *Medicine (Baltimore)*. 2021 Jan 22;100(3):e23948.

250. Huang SF, Yu YL, Cui YF, Lou YM, Liao MQ, Wang CY, Xu S, Chen HE, Gao XP, Dai SH, Peng XL, Zhao D, Wang L, Ping Z, Zeng FF. **Association between serum prostate-specific antigen concentrations and the risk of developing type 2 diabetes mellitus in Chinese men: A cohort study.** *J Diabetes Investig.* 2021 Feb 5. Epub ahead of print.
251. LePage AK, Wise JB, Bell JJ, Tumin D, Smith AW. **Distance from the endocrinology clinic and diabetes control in a rural pediatric population.** *J Pediatr Endocrinol Metab.* 2020 Oct 12;34(2):187-193.
252. Singh B, Kaur P, Patel P, Reid RJ, Kumar A, Kaur S, Guragai N, Rushdy A, Bikkina M, Shamooun F. **COVID-19 and Diabetic Ketoacidosis: A Single Center Experience.** *Cureus.* 2021 Jan 30;13(1):e13000.
253. Rosa LS, Mistro S, Oliveira MG, Kochergin CN, Cortes ML, de Medeiros DS, Soares DA, Louzado JA, Silva KO, Bezerra VM, Amorim WW, Barone M, Passos LC. **Cost-Effectiveness of Point-of-Care A1C Tests in a Primary Care Setting.** *Front Pharmacol.* 2021 Jan 19;11:588309.
254. Martinez FJ, Ferguson GT, Bourne E, Ballal S, Darken P, Aurivillius M, Dorinsky P, Reisner C. **Budesonide/Glycopyrrolate/Formoterol Fumarate Metered Dose Inhaler Improves Exacerbation Outcomes in Patients with COPD without a Recent Exacerbation History: A Subgroup Analysis of KRONOS.** *Int J Chron Obstruct Pulmon Dis.* 2021 Jan 28;16:179-189.
255. Imai C, Li L, Hardie RA, Georgiou A. **Adherence to guideline-recommended HbA1c testing frequency and better outcomes in patients with type 2 diabetes: a 5-year retrospective cohort study in Australian general practice.** *BMJ Qual Saf.* 2021 Feb 4;bmjqs-2020-012026. Epub ahead of print.
256. Sadok I, Rachwał K, Jonik I, Staniszevska M. **Reliable chromatographic assay for measuring of indoleamine 2,3-dioxygenase 1 (IDO1) activity in human cancer cells.** *J Enzyme Inhib Med Chem.* 2021 Dec;36(1):581-592.
257. Maasen K, Hanssen NMJ, van der Kallen CJH, Stehouwer CDA, van Greevenbroek MMJ, Schalkwijk CG. **Polymorphisms in Glyoxalase I Gene Are Not Associated with Glyoxalase I Expression in Whole Blood or Markers of Methylglyoxal Stress: The CODAM Study.** *Antioxidants (Basel).* 2021 Feb 2;10(2):219.
258. Seo YH, Shin HY. **Relationship between hs-CRP and HbA1c in Diabetes Mellitus Patients: 2015-2017 Korean National Health and Nutrition Examination Survey.** *Chonnam Med J.* 2021 Jan;57(1):62-67. Epub 2021 Jan 25.
259. Richeldi L, Piraino A, Macagno F, Micarelli G, Ingrassia E. **The Impact of Fixed Triple Therapy with Beclometasone/Formoterol/Glycopyrronium on Health Status and Adherence in Chronic Obstructive Pulmonary Disease (COPD) in an Italian Context of Real Life: The TRITRIAL Study Protocol.** *Int J Chron Obstruct Pulmon Dis.* 2021 Jan 27;16:159-166.
260. Ohkuma T, Chalmers J, Cooper M, Hamet P, Harrap S, Marre M, Mancia G, Poulter N, Woodward M. **The comparative effects of intensive glucose lowering in diabetes patients aged below or above 65 years: Results from the ADVANCE trial.** *Diabetes Obes Metab.* 2021 Feb 4. Epub ahead of print.
261. Sugiyama K, Miura J, Shimizu M, Takashima A, Matsuda Y, Kayashima H, Okamoto M, Nagashima T, Araki T. **Effects of advanced glycation end products on dental pulp calcification.** *Oral Dis.* 2021 Feb 4. Epub ahead of print.
262. Parra DI, Guevara SLR, Rojas LZ. **'Teaching: individual' to improve adherence in hypertension and type 2 diabetes.** *Br J Community Nurs.* 2021 Feb 2;26(2):84-91.

- 263.Łebkowska A, Adamska A, Krentowska A, Uruska A, Rogowicz-Frontczak A, Araszkiwicz A, Ożegowska K, Hryniewicka J, Leśniewska M, Wender-Ożegowska E, Zozulińska-Ziółkiewicz D, Kowalska I. **The influence of prepubertal onset of type 1 diabetes and age of menarche on polycystic ovary syndrome diagnosis.** *J Clin Endocrinol Metab.* 2021 Feb 4:dgab062. Epub ahead of print.
- 264.Staniszevska M, Bronowicka-Szydełko A, Gostomska-Pampuch K, Szkudlarek J, Bartyś A, Bieg T, Gamian E, Kochman A, Picur B, Pietkiewicz J, Kuroпка P, Szeja W, Wiśniewski J, Ziółkowski P, Gamian A. **The melibiose-derived glycation product mimics a unique epitope present in human and animal tissues.** *Sci Rep.* 2021 Feb 3;11(1):2940.
- 265.Takino JI, Sato T, Kanetaka T, Okihara K, Nagamine K, Takeuchi M, Hori T. **RasGRP2 inhibits glyceraldehyde-derived toxic advanced glycation end-products from inducing permeability in vascular endothelial cells.** *Sci Rep.* 2021 Feb 3;11(1):2959.
- 266.Masato A, Sandre M, Antonini A, Bubacco L. **Patients Stratification Strategies to Optimize the Effectiveness of Scavenging Biogenic Aldehydes: Towards a Neuroprotective Approach for Parkinson's Disease.** *Curr Neuropharmacol.* 2021 Feb 3. Epub ahead of print.
- 267.Sotokawauchi A, Matsui T, Higashimoto Y, Nishino Y, Koga Y, Yagi M, Yamagishi SI. **DNA aptamer raised against receptor for advanced glycation end products suppresses renal tubular damage and improves insulin resistance in diabetic mice.** *Diab Vasc Dis Res.* 2021 Jan-Feb;18(1):1479164121990533.
- 268.Cho KH, Kim JR, Lee IC, Kwon HJ. **Native High-Density Lipoproteins (HDL) with Higher Paraoxonase Exerts a Potent Antiviral Effect against SARS-CoV-2 (COVID-19), While Glycated HDL Lost the Antiviral Activity.** *Antioxidants (Basel).* 2021 Feb 1;10(2):209.
- 269.García-Díez G, Monreal-Corona R, Mora-Diez N. **Complexes of Copper and Iron with Pyridoxamine, Ascorbic Acid, and a Model Amadori Compound: Exploring Pyridoxamine's Secondary Antioxidant Activity.** *Antioxidants (Basel).* 2021 Feb 1;10(2):208.
- 270.Morais SR, Bezerra IN, Souza AM, Vergara CMAC, Sichieri R. **Alimentação for a de casa e biomarcadores de doenças crônicas em adolescentes brasileiros [Eating away from home and biomarkers for chronic noncommunicable diseases in Brazilian adolescents].** *Cad Saude Publica.* 2021 Feb 3;37(1):e00219619. Portuguese.
- 271.Jackson MA, Ahmann A, Shah VN. **Type 2 Diabetes and the Use of Real-Time Continuous Glucose Monitoring.** *Diabetes Technol Ther.* 2021 Mar;23(S1):S27-S34.
- 272.Hagens LA, Heijnen NFL, Smit MR, Schultz MJ, Bergmans DCJJ, Schnabel RM, Bos LDJ. **Systematic review of diagnostic methods for acute respiratory distress syndrome.** *ERJ Open Res.* 2021 Jan 18;7(1):00504-2020.
- 273.Shen Y, Chen W, Han L, Bian Q, Fan J, Cao Z, Jin X, Ding T, Xian Z, Guo Z, Zhang W, Ju D, Mei X. **VEGF-B antibody and interleukin-22 fusion protein ameliorates diabetic nephropathy through inhibiting lipid accumulation and inflammatory responses.** *Acta Pharm Sin B.* 2021 Jan;11(1):127-142. Epub 2020 Jul 13.
- 274.S S, Rao MY, Aslam SM. **Assessment of Functions of the Autonomic Nervous System in the Elderly with Different Comorbid Factors.** *J Neurosci Rural Pract.* 2021 Jan;12(1):80-87. Epub 2020 Nov 4.
- 275.Zhu YY, Zheng RZ, Wang GX, Chen L, Shi LX, Su Q, Xu M, Xu Y, Chen YH, Yu XF, Yan L, Wang TG, Zhao ZY, Qin GJ, Wan Q, Chen G, Gao ZN, Shen FX, Luo ZJ, Qin YF,

- Huo YN, Li Q, Ye Z, Zhang YF, Liu C, Wang YM, Wu SL, Yang T, Deng HC, Zhao JJ, Chen LL, Mu YM, Tang XL, Hu RY, Wang WQ, Ning G, Li M, Lu JL, Bi YF. **Inverted U-Shaped Associations between Glycemic Indices and Serum Uric Acid Levels in the General Chinese Population: Findings from the China Cardiometabolic Disease and Cancer Cohort (4C) Study.** *Biomed Environ Sci.* 2021 Jan 20;34(1):9-18.
276. Garies S, McBrien K, Quan H, Manca D, Drummond N, Williamson T. **A data quality assessment to inform hypertension surveillance using primary care electronic medical record data from Alberta, Canada.** *BMC Public Health.* 2021 Feb 2;21(1):264.
277. Alwosais EZM, Al-Ozairi E, Zafar TA, Alkandari S. **Chia seed (*Salvia hispanica* L.) supplementation to the diet of adults with type 2 diabetes improved systolic blood pressure: A randomized controlled trial.** *Nutr Health.* 2021 Feb 2;260106020981819. Epub ahead of print.
278. Fedullo AL, Schiattarella A, Morlando M, Raguzzini A, Toti E, De Franciscis P, Peluso I. **Mediterranean Diet for the Prevention of Gestational Diabetes in the Covid-19 Era: Implications of HbA1c in Diabetes.** *Int J Mol Sci.* 2021 Jan 26;22(3):1213.
279. Kang S, Zhong Y, Liu D, Li W. **Traditional Chinese medicine fumigation as auxiliary treatment of diabetic peripheral neuropathy: A protocol for systematic review and meta-analysis.** *Medicine (Baltimore).* 2021 Jan 29;100(4):e24200.
280. Rehman S, Alouffi S, Faisal M, Qahtan AA, Alatar AA, Ahmad S. **Methylglyoxal mediated glycation leads to neo-epitopes generation in fibrinogen: Role in the induction of adaptive immune response.** *Int J Biol Macromol.* 2021 Jan 30;175:535-543. Epub ahead of print.
281. Afolabi BI, Idowu BM, Onigbinde SO. **Achilles tendon degeneration on ultrasound in type 2 diabetic patients.** *J Ultrason.* 2021;20(83):e291-e299. Epub 2020 Dec 18.
282. Bajaj S, Aiwale A, Trailokya A, Sharma A. **Clinical Evidence of Evogliptin plus Metformin in Management of Type 2 Diabetes mellitus.** *J Assoc Physicians India.* 2021 Feb;69(2):25-29.
283. Saluja M, Pillai D. **Exercise Prescription in Diabetes- S.M.A.R.T.: A Prospective Study.** *J Assoc Physicians India.* 2021 Feb;69(2):22-24.
284. Wang JS, Lee IT, Lee WJ, Lin SY, Lee WL, Liang KW, Sheu WH. **Postchallenge glucose increment was associated with hemoglobin glycation index in subjects with no history of diabetes.** *J Investig Med.* 2021 Feb 1;jim-2020-001646. Epub ahead of print.
285. Miras AD, Kamocka A, Tan T, Pérez-Pevida B, Chahal H, Moorthy K, Purkayastha S, Patel A, Umpleby AM, Frost G, Bloom SR, Ahmed AR, Rubino F. **Long limb compared with standard limb Roux-en-Y gastric bypass for type 2 diabetes and obesity: the LONG LIMB RCT.** *Southampton (UK): NIHR Journals Library;* 2021 Feb.
286. Hu MD, Lawrence KG, Bodkin MR, Kwok RK, Engel LS, Sandler DP. **Neighborhood Deprivation, Obesity, and Diabetes in Residents of the US Gulf Coast.** *Am J Epidemiol.* 2021 Feb 1;190(2):295-304.
287. Ferdousi M, Azmi S, Kalteniece A, Petropoulos IN, Ponirakis G, Asghar O, Alam U, Marshall A, Boulton AJM, Efron N, Soran H, Jeziorska M, Malik RA. **Greater small nerve fibre damage in the skin and cornea of type 1 diabetic patients with painful compared to painless diabetic neuropathy.** *Eur J Neurol.* 2021 Feb 1. Epub ahead of print.
288. Lee J, Jeong ET, Lim JM, Park SG. **Development of the facial glycation imaging system for in situ human face skin glycation index measurement.** *J Cosmet Dermatol.* 2021 Feb 1. Epub ahead of print.

289. Wu CH, Chen CH, Hsieh PF, Lee YH, Kuo WW, Wu RC, Hung CH, Yang YL, Lin VC. **Verbascoside inhibits the epithelial-mesenchymal transition of prostate cancer cells through high-mobility group box 1/receptor for advanced glycation end-products/TGF- β pathway.** *Environ Toxicol.* 2021 Feb 1. Epub ahead of print.
290. Elhennawy MG, Abdelaleem EA, Zaki AA, Mohamed WR. **Cinnamaldehyde and hesperetin attenuate TNBS-induced ulcerative colitis in rats through modulation of the JAK2/STAT3/SOCS3 pathway.** *J Biochem Mol Toxicol.* 2021 Jan 31:e22730. Epub ahead of print.
291. Soi S, Bains VK, Srivastava R, Madan R. **Comparative evaluation of improvement in periodontal and glycemic health status of type 2 diabetes mellitus patients after scaling and root planing with or without adjunctive use of diode laser.** *Lasers Med Sci.* 2021 Feb 1. Epub ahead of print.
292. Yulianti E, Sunarti, Wahyuningsih MSH. **The effect of *Kappaphycus alvarezii* fraction on plasma glucose, Advanced Glycation End-products formation, and renal RAGE gene expression.** *Heliyon.* 2021 Jan 19;7(1):e05978.
293. Almari M, Mohammad A, Abubaker J, Ziyab AH. **Obesity and Prediabetes are Jointly Associated with Lipid Abnormalities Among Adolescents: A Cross-Sectional Study.** *Diabetes Metab Syndr Obes.* 2021 Jan 22;14:345-353.
294. Randhawa G, Syed KA, Singh K, Kundal SV, Oli S, Silver M, Syed SA, Suban Na Ayutthaya T, Williams S, Lodato ZL, Rozvadovskiy V, Kamholz S, Wolf L. **The relationship between obesity, hemoglobin A1c and the severity of COVID-19 at an urban tertiary care center in New York City: a retrospective cohort study.** *BMJ Open.* 2021 Jan 31;11(1):e044526.
295. Zhu Z, Fang R, Yang J, Khan IA, Huang J, Huang M. **Air frying combined with grape seed extract inhibits N ^{ϵ} -carboxymethyllysine and N ^{ϵ} -carboxyethyllysine by controlling oxidation and glycosylation.** *Poult Sci.* 2021 Feb;100(2):1308-1318. Epub 2020 Dec 2.
296. Rodrigues R, Rossi ICB, Rossi BF, Gomes DC, Penha-Silva N. **New glycemic metrics and traditional clinical and laboratory profiles of children and adolescents with type 1 diabetes mellitus in an outpatient follow-up.** *Diabetes Res Clin Pract.* 2021 Jan 28;173:108680. Epub ahead of print.
297. Wei J, Dai Y, Wen W, Li J, Ye LL, Xu S, Duan DD. **Blood-brain barrier integrity is the primary target of alcohol abuse.** *Chem Biol Interact.* 2021 Mar 1;337:109400. Epub 2021 Jan 28.
298. Lai PH, Wang TH, Zhang NY, Wu KC, Yao CJ, Lin CJ. **Changes of blood-brain-barrier function and transfer of amyloid beta in rats with collagen-induced arthritis.** *J Neuroinflammation.* 2021 Jan 30;18(1):35.
299. Abu-Zaid A, Altowairqi AK, Dissanayaka T, Oganesyana A, Bhagavathul AS, Alhabeeb H, Baradhwan A, Alomar S, Tom S. **A systematic review and dose-response meta-analysis on the efficacy of dapagliflozin in patients with type 1 diabetes mellitus.** *Pharmacol Res.* 2021 Jan 27:105456. Epub ahead of print.
300. Zhou Y, Chen K, Du X, Tang J, Shi B. **Risk Factors for Albuminuria in Normotensive Older Adults with Type 2 Diabetes Mellitus and Normal Renal Function: A Cross-Sectional Study.** *Diabetes Ther.* 2021 Jan 29. Epub ahead of print.
301. Vors C, Rancourt-Bouchard M, Couillard C, Giguere I, Couture P, Lamarche B. **Sex May Modulate the Effects of Combined Polyphenol Extract and L-citrulline**

- Supplementation on Ambulatory Blood Pressure in Adults with Prehypertension: A Randomized Controlled Trial.** *Nutrients.* 2021 Jan 27;13(2):399.
302. Abdallah IM, Al-Shami KM, Yang E, Kaddoumi A. **Blood-Brain Barrier Disruption Increases Amyloid-Related Pathology in TgSwDI Mice.** *Int J Mol Sci.* 2021 Jan 27;22(3):1231.
303. Korwar AM, Zhang Q. **Comprehensive Quantification of Carboxymethyllysine-Modified Peptides in Human Plasma.** *J Am Soc Mass Spectrom.* 2021 Mar 3;32(3):744-752. Epub 2021 Jan 29.
304. Kalra S, Unnikrishnan AG, Bantwal G, Das S, Polavarapu NK, Gaurav K. **The Position of Gliclazide in the Evolving Landscapes and Disease Continuum of T2DM: A Collaborative Delphi Survey-Based Consensus from India.** *Diabetes Ther.* 2021 Jan 28. Epub ahead of print.
305. Steineck IIK, Ranjan AG, Schmidt S, Norgaard K. **Time spent in hypoglycemia is comparable when the same amount of exercise is performed 5 or 2 days weekly: a randomized crossover study in people with type 1 diabetes.** *BMJ Open Diabetes Res Care.* 2021 Jan;9(1):e001919.
306. Faria JV, Valido IH, Paz WHP, da Silva FMA, de Souza ADL, Acho LRD, Lima ES, Boleti APA, Marinho JVN, Salvador MJ, Dos Santos EL, Soares PK, López-Mesas M, Maia JMF, Koolen HHF, Bataglion GA. **Comparative evaluation of chemical composition and biological activities of tropical fruits consumed in Manaus, central Amazonia, Brazil.** *Food Res Int.* 2021 Jan;139:109836. Epub 2020 Oct 26.
307. Lee HW, Shin J, Wilson BS, Oh JW. **Peripheral immune tolerance by prolactin-induced protein originated from human invariant natural killer T cells.** *Bioengineered.* 2021 Dec;12(1):461-475.
308. Nabi R, Alvi SS, Shah A, Chaturvedi CP, Faisal M, Alatar AA, Ahmad S, Khan MS. **Ezetimibe attenuates experimental diabetes and renal pathologies via targeting the advanced glycation, oxidative stress and AGE-RAGE signalling in rats.** *Arch Physiol Biochem.* 2021 Jan 29:1-16. Epub ahead of print.
309. Yamazaki T, Mimura I, Tanaka T, Nangaku M. **Treatment of Diabetic Kidney Disease: Current and Future.** *Diabetes Metab J.* 2021 Jan;45(1):11-26. Epub 2021 Jan 22.
310. Usmani OS, Roche N, Jenkins M, Stjepanovic N, Mack P, De Backer W. **Consistent Pulmonary Drug Delivery with Whole Lung Deposition Using the Aerosphere Inhaler: A Review of the Evidence.** *Int J Chron Obstruct Pulmon Dis.* 2021 Jan 18;16:113-124.
311. Sruthi CR, Raghu KG. **Advanced glycation end products and their adverse effects: The role of autophagy.** *J Biochem Mol Toxicol.* 2021 Jan 28:e22710. Epub ahead of print.
312. Guo T, Shen Q, Ouyang X, Guo W, Li J, He W, Yu B, Wu C, Zhou Z, Luo H, Peng H. **Clinical Findings in Diabetes Mellitus Patients with COVID-19.** *J Diabetes Res.* 2021 Jan 8;2021:7830136.
313. Khalili S, Sabaghian T, Sedaghat M, Soroureddin Z, Askari E, Khalili N. **Prevalence, Risk Factors and Outcomes Associated with Acute Kidney Injury in Patients Hospitalized for COVID-19: A Comparative Study between Diabetic and Nondiabetic Patients.** *J Diabetes Res.* 2021 Jan 6;2021:6666086.
314. McLeese RH, Zhao J, Fu D, Yu JY, Brazil DP, Lyons TJ. **Effects of modified lipoproteins on human trophoblast cells: a role in pre-eclampsia in pregnancies complicated by diabetes.** *BMJ Open Diabetes Res Care.* 2021 Jan;9(1):e001696.

315. Bancks MP, Bertoni AG, Carnethon M, Chen H, Cotch MF, Gujral UP, Herrington D, Kanaya AM, Szklo M, Vaidya D, Kandula NR. **Association of Diabetes Subgroups With Race/Ethnicity, Risk Factor Burden and Complications: The MASALA and MESA Studies.** *J Clin Endocrinol Metab.* 2021 Jan 27:dga962. Epub ahead of print.
316. Helliwell R, Warnes H, Kietsiriroje N, Campbell M, Birch R, Pearson SM, Ajjan RA. **Body mass index, estimated glucose disposal rate and vascular complications in type 1 diabetes: Beyond glycated haemoglobin.** *Diabet Med.* 2021 Jan 27:e14529. Epub ahead of print.
317. Mrigpuri P, Sonal S, Spalgais S, Goel N, Menon B, Kumar R. **Uncontrolled diabetes mellitus: A risk factor for post COVID fibrosis.** *Monaldi Arch Chest Dis.* 2021 Jan 25;91(1).
318. van Waarde A, Marcolini S, de Deyn PP, Dierckx RAJO. **PET Agents in Dementia: An Overview.** *Semin Nucl Med.* 2021 Jan 23:S0001-2998(20)30131-8. Epub ahead of print.
319. Kianpour F, Fararouei M, Hassanzadeh J, Mohammadi M, Dianatinasab M. **Performance of diabetes screening tests: an evaluation study of Iranian diabetes screening program.** *Diabetol Metab Syndr.* 2021 Jan 26;13(1):13.
320. Chen Y, Li W, Nong X, Liang C, Li J, Lu W, Wang B, Yuan Z, Yang S. **Role of Artesunate on cardiovascular complications in rats with type 1 diabetes mellitus.** *BMC Endocr Disord.* 2021 Jan 26;21(1):19.
321. Zealley B, de Grey ADNJ. **Commentary on Some Recent Theses Relevant to Combating Aging: February 2021.** *Rejuvenation Res.* 2021 Feb;24(1):68-73.
322. de Oliveira Loureiro T, Cardoso JN, Lopes CDPL, Carreira AR, Rodrigues- Barros S, Vide-Escada A, Campos NP. **The effect of insulin pump therapy in retinal vasculature in type 1 diabetic patients.** *Eur J Ophthalmol.* 2021 Jan 26:1120672121990576. Epub ahead of print.
323. Sapkota A, Park SJ, Choi JW. **Receptor for Advanced Glycation End Products Is Involved in LPA⁵-Mediated Brain Damage after a Transient Ischemic Stroke.** *Life (Basel).* 2021 Jan 22;11(2):80.
324. Meng S, Cui Z, Li M, Li T, Wu F, Kang T, Meng H. **Associations between Dietary Animal and Plant Protein Intake and Cardiometabolic Risk Factors-A Cross-Sectional Study in China Health and Nutrition Survey.** *Nutrients.* 2021 Jan 23;13(2):336.
325. Albokhary K, Aljaser F, Abudawood M, Tabassum H, Bakhsh A, Alhammada S, Aleadia R, Almajed F, Subki R. **Role of Oxidative Stress and Severity of Diabetic Retinopathy in Type 1 & Type 2 Diabetes.** *Ophthalmic Res.* 2021 Jan 26. Epub ahead of print.
326. Lin R, Brown F, James S, Jones J, Ekinici E. **Continuous glucose monitoring: A review of the evidence in type 1 and 2 diabetes mellitus.** *Diabet Med.* 2021 Jan 26:e14528. Epub ahead of print.
327. Meek CL, Tundidor D, Feig DS, Yamamoto JM, Scott EM, Ma DD, Halperin JA, Murphy HR, Corcoy R; CONCEPTT Collaborative Group. **Novel Biochemical Markers of Glycemia to Predict Pregnancy Outcomes in Women With Type 1 Diabetes.** *Diabetes Care.* 2021 Mar;44(3):681-689. Epub 2021 Jan 25.
328. Veraart JKE, Kamphuis J, Schlegel M, Schoevers RA. **Oral S-ketamine effective after deep brain stimulation in severe treatment-resistant depression and extensive comorbidities.** *BMJ Case Rep.* 2021 Jan 25;14(1):e238135.

329. Marro M, Kossar AP, Xue Y, Frasca A, Levy RJ, Ferrari G. **Noncalcific Mechanisms of Bioprosthetic Structural Valve Degeneration.** *J Am Heart Assoc.* 2021 Feb 2;10(3):e018921. Epub 2021 Jan 26.
330. Kurniawan AL, Yang YL, Chin MY, Hsu CY, Paramastri R, Lee HA, Ni PY, Chao J. **Association of Nutrition Education and Its Interaction with Lifestyle Factors on Kidney Function Parameters and Cardiovascular Risk Factors among Chronic Kidney Disease Patients in Taiwan.** *Nutrients.* 2021 Jan 21;13(2):298.
331. Frolova N, Soboleva A, Nguyen VD, Kim A, Ihling C, Eisenschmidt-Bönn D, Mamontova T, Herfurth UM, Wessjohann LA, Sinz A, Birkemeyer C, Frolov A. **Probing glycation potential of dietary sugars in human blood by an integrated in vitro approach.** *Food Chem.* 2021 Jun 15;347:128951. Epub 2020 Dec 27.
332. Deeb A, Muammar T, Alsaffar H, Sedaghat S, Al Hassani N, Odeh R, Alkhayyat H, Al Sinani A, Attia N, Adhami S, Elbarbary N. **Use of ambulatory glucose monitoring and analysis of ambulatory glucose profile in clinical practice for diabetes management; a position statement of the Arab Society of Paediatric Endocrinology and diabetes.** *Diabetes Res Clin Pract.* 2021 Jan 22;173:108671. Epub ahead of print.
333. Kalra S, Unnikrishnan AG, Baruah MP, Sahay R, Bantwal G. **Metabolic and Energy Imbalance in Dysglycemia-Based Chronic Disease.** *Diabetes Metab Syndr Obes.* 2021 Jan 15;14:165-184.
334. Kitaura A, Nishinaka T, Hamasaki S, Hatipoglu OF, Wake H, Nishibori M, Mori S, Nakao S, Takahashi H. **Advanced glycation end-products reduce lipopolysaccharide uptake by macrophages.** *PLoS One.* 2021 Jan 25;16(1):e0245957.
335. Eleazu C, Suleiman JB, A Othman Z, Zakaria Z, Nna VU, Mohamed M. **Effect of bee bread on some biochemical parameters and skeletal muscle histology of high-fat diet-induced obese Sprague-Dawley rats.** *J Food Biochem.* 2021 Feb;45(2):e13626. Epub 2021 Jan 25.
336. Laiteerapong N, Staab EM, Wan W, Quinn MT, Campbell A, Gedeon S, Schaefer CT, Burnet DL, Chin MH. **Integration of Diabetes and Depression Care Is Associated with Glucose Control in Midwestern Federally Qualified Health Centers.** *J Gen Intern Med.* 2021 Jan 25. Epub ahead of print.
337. Currò CT, Nicocia G, Ziccone V, Ciacciarelli A, Russo G, Toscano A, Terranova C, Giralanda P. **Pimozide and pancreatic cancer in diabetic chorea: a case report.** *Int J Neurosci.* 2021 Feb 3:1-4. Epub ahead of print.
338. Su D, Li J, Guo M, Li Y, Ma S. **Clinical Analysis of Electrolyte Disorders in Patients with Diabetic Ketoacidosis.** *Clin Lab.* 2021 Jan 1;67(1).
339. Pekarsky A, Reininger M, Spadiut O. **The impact of technical failures on recombinant production of soluble proteins in Escherichia coli: a case study on process and protein robustness.** *Bioprocess Biosyst Eng.* 2021 Jan 24. Epub ahead of print.
340. Bilger M, Shah M, Tan NC, Tan CYL, Bundoc FG, Bairavi J, Finkelstein EA. **Process- and Outcome-Based Financial Incentives to Improve Self-Management and Glycemic Control in People with Type 2 Diabetes in Singapore: A Randomized Controlled Trial.** *Patient.* 2021 Jan 25. Epub ahead of print.
341. Nomoto H, Oba-Yamamoto C, Takahashi Y, Takeuchi J, Nagai S, Yokoyama H, Taneda S, Kurihara Y, Aoki S, Kameda H, Cho KY, Nakamura A, Atsumi T, Miyoshi H. **Effects of Switching from Liraglutide or Dulaglutide to Subcutaneous Semaglutide on Glucose Metabolism and Treatment Satisfaction in Patients with Type 2 Diabetes: Protocol for a Multicenter, Prospective, Randomized, Open-Label, Blinded-**

- Endpoint, Parallel-Group Comparison Study (The SWITCH-SEMA 1 Study).** *Diabetes Ther.* 2021 Jan 24. Epub ahead of print.
342. Torres GG, Nygaard M, Caliebe A, Blanché H, Chantalat S, Galan P, Lieb W, Christiansen L, Deleuze JF, Christensen K, Strauch K, Müller-Nurasyid M, Peters A, Nöthen MM, Hoffmann P, Flachsbart F, Schreiber S, Ellinghaus D, Franke A, Dose J, Nebel A. **Exome-wide association study identifies FN3KRP and PGP as new candidate longevity genes.** *J Gerontol A Biol Sci Med Sci.* 2021 Jan 25;glab023. Epub ahead of print.
343. Alquezar C, Arya S, Kao AW. **Tau Post-translational Modifications: Dynamic Transformers of Tau Function, Degradation, and Aggregation.** *Front Neurol.* 2021 Jan 7;11:595532.
344. Beeh KM, Kuna P, Corradi M, Viaud I, Guasconi A, Georges G. **Comparison of Dry-Powder Inhaler and Pressurized Metered-Dose Inhaler Formulations of Extrafine Beclomethasone Dipropionate/Formoterol Fumarate/Glycopyrronium in Patients with COPD: The TRI-D Randomized Controlled Trial.** *Int J Chron Obstruct Pulmon Dis.* 2021 Jan 14;16:79-89.
345. Liu C, Yi X, Lyu Y, Ren W, Zhou Y, Feng G, Wan W, Jiang XJ. **Elevated Plasma Angiopoietinlike Protein 5 (ANGPTL5) Is More Positively Associated with Glucose Metabolism Disorders in Patients with Metabolic Syndrome.** *Med Sci Monit.* 2021 Jan 24;27:e929626.
346. Bernardo J, Malheiro I, Videira RA, Valentão P, Santos AC, Veiga F, Andrade PB. **Trichilia catigua and Turnera diffusa extracts: In vitro inhibition of tyrosinase, antiglycation activity and effects on enzymes and pathways engaged in the neuroinflammatory process.** *J Ethnopharmacol.* 2021 May 10;271:113865. Epub 2021 Jan 21.
347. Papi A, Virchow JC, Singh D, Kots M, Vele A, Georges G, Canonica GW. **Extrafine triple therapy and asthma exacerbation seasonality: TRIMARAN and TRIGGER post hoc analyses.** *J Allergy Clin Immunol.* 2021 Jan 21:S0091-6749(21)00086-5. Epub ahead of print.
348. Zhang X, Yang Z, Zhang M, Zhu Y, Zhao Z, Huang Z, Li C, Zhou M, Farmer AJ, Tang J, Wang L. **Independent effects of 2hPG, FPG and HbA1c on cardiovascular risk: Analysis of a nationally representative sample from China.** *Diabetes Res Clin Pract.* 2021 Jan 21;173:108672. Epub ahead of print.
349. Umimura T, Orita S, Inage K, Shiga Y, Maki S, Inoue M, Kinoshita H, Norimoto M, Sato T, Sato M, Suzuki M, Enomoto K, Hozumi T, Mizuki N, Takaoka H, Kim G, Nakamura J, Hagiwara S, Akazawa T, Takahashi H, Koda M, Furuya T, Shiko Y, Kawasaki Y, Ohtori S. **Percutaneously-quantified advanced glycation end-products (AGEs) accumulation associates with low back pain and lower extremity symptoms in middle-aged low back pain patients.** *J Clin Neurosci.* 2021 Feb;84:15-22. Epub 2020 Dec 28.
350. Mingrone G, Panunzi S, De Gaetano A, Guidone C, Iaconelli A, Capristo E, Chamseddine G, Bornstein SR, Rubino F. **Metabolic surgery versus conventional medical therapy in patients with type 2 diabetes: 10-year follow-up of an open-label, single-centre, randomised controlled trial.** *Lancet.* 2021 Jan 23;397(10271):293-304.
351. Miras AD, le Roux CW. **Metabolic surgery versus conventional therapy in type 2 diabetes.** *Lancet.* 2021 Jan 23;397(10271):256-257.

352. Daussin FN, Boulanger E, Lancel S. **From mitochondria to sarcopenia: Role of inflammaging and RAGE-ligand axis implication.** *Exp Gerontol.* 2021 Apr;146:111247. Epub 2021 Jan 20.
353. Korpijaakko C, Wasenius N, Teramo K, Klemetti MM, Kautiainen H, Eriksson JG, Laine MK. **Skin Autofluorescence in Young Adult Offspring of Women with Type 1 Diabetes: A Cross-Sectional Case-Control Study.** *Diabetes Ther.* 2021 Jan 23. Epub ahead of print.
354. Delpino FM, Figueiredo LM, da Silva BGC, da Silva TG, Mintem GC, Bielemann RM, Gigante DP. **Omega-3 supplementation and diabetes: A systematic review and meta-analysis.** *Crit Rev Food Sci Nutr.* 2021 Jan 22:1-14. Epub ahead of print.
355. Delpino FM, Figueiredo LM. **Resveratrol supplementation and type 2 diabetes: a systematic review and meta-analysis.** *Crit Rev Food Sci Nutr.* 2021 Jan 22:1-16. Epub ahead of print.
356. Behl T, Sharma E, Sehgal A, Kaur I, Kumar A, Arora R, Pal G, Kakkar M, Kumar R, Bungau S. **Expatriating the molecular approaches of HMGB1 in diabetes mellitus: Highlighting signalling pathways via RAGE and TLRs.** *Mol Biol Rep.* 2021 Feb;48(2):1869-1881. Epub 2021 Jan 21.
357. Aggarwal A, Pal R, Bhadada SK, Ram S, Garg A, Bhansali A, Singh P, Thakur JS, Singh T, Sachdeva N, Rao SD. **Bone mineral density in healthy adult Indian population: the Chandigarh Urban Bone Epidemiological Study (CUBES).** *Arch Osteoporos.* 2021 Jan 21;16(1):17.
358. Chuntakaruk H, Kongtawelert P, Pothacharoen P. **Chondroprotective effects of purple corn anthocyanins on advanced glycation end products induction through suppression of NF- κ B and MAPK signaling.** *Sci Rep.* 2021 Jan 21;11(1):1895.
359. Dhage S, Ferdousi M, Adam S, Ho JH, Kalteniece A, Azmi S, Alam U, Ponirakis G, Petropoulos I, Atkinson AJ, Marshall A, Jeziorska M, Soran H, Malik RA. **Corneal confocal microscopy identifies small fibre damage and progression of diabetic neuropathy.** *Sci Rep.* 2021 Jan 21;11(1):1859.
360. Klimiuk A, Zalewska A, Knapp M, Sawicki R, Ładny JR, Maciejczyk M. **Salivary Gland Dysfunction in Patients with Chronic Heart Failure Is Aggravated by Nitrosative Stress, as Well as Oxidation and Glycation of Proteins.** *Biomolecules.* 2021 Jan 18;11(1):119.
361. Mascolo E, Liguori F, Stufiera Mecarelli L, Amoroso N, Merigliano C, Amadio S, Volonté C, Contestabile R, Tramonti A, Vernì F. **Functional Inactivation of *Drosophila* GCK Orthologs Causes Genomic Instability and Oxidative Stress in a Fly Model of MODY-2.** *Int J Mol Sci.* 2021 Jan 18;22(2):918.
362. Butcher L, Carnicero JA, Pérès K, Colpo M, Gomez Cabrero D, Dartigues JF, Bandinelli S, Garcia-Garcia FJ, Rodríguez-Mañas L, Erusalimsky JD; FRAILOMIC Consortium. **Higher sRAGE Levels Predict Mortality in Frail Older Adults with Cardiovascular Disease.** *Gerontology.* 2021 Jan 21:1-9. Epub ahead of print.
363. Hatada M, Saito S, Yonehara S, Tsugawa W, Asano R, Ikebukuro K, Sode K. **Development of glycated peptide enzyme sensor based flow injection analysis system for haemoglobin A1c monitoring using quasi-direct electron transfer type engineered fructosyl peptide oxidase.** *Biosens Bioelectron.* 2021 Apr 1;177:112984. pub 2021 Jan 8.
364. Saglam E, Zırh S, Aktas CC, Muftuoglu SF, Bilginer B. **Papaverine provides neuroprotection by suppressing neuroinflammation and apoptosis in the traumatic**

- brain injury via RAGE- NF- κ B pathway.** *J Neuroimmunol.* 2021 Mar 15;352:577476. Epub 2021 Jan 9.
365. Arbiol-Roca A, Pérez-Hernández EA, Aisa-Abdellaoui N, Valls-Guallar T, Gálvez-Carmona F, Mariano-Serrano E, Medina-Casanovas M, Ruiz-Morer MR. **The utility HBA1c test as a screening biomarker for detecting gestational diabetes mellitus.** *Clin Biochem.* 2021 Jan 18:S0009-9120(21)00003-5. Epub ahead of print.
366. Rodrigues DLG, Belber GS, Padilha FVQ, Spinel LF, Moreira FR, Maeyama MA, Pinho APNM, Júnior AA. **Impact of Teleconsultation on Patients With Type 2 Diabetes in the Brazilian Public Health System: Protocol for a Randomized Controlled Trial (TELEconsulta Diabetes Trial).** *JMIR Res Protoc.* 2021 Jan 21;10(1):e23679.
367. Helleputte S, De Backer T, Calders P, Pauwels B, Shadid S, Lapauw B. **THE ADDED AND INTERPRETATIVE VALUE OF CGM-DERIVED PARAMETERS IN TYPE 1 DIABETES DEPENDS ON THE LEVEL OF GLYCEMIC CONTROL.** *Endocr Pract.* 2021 Jan;27(1):44-50. Epub 2020 Nov 18.
368. Liu F, Liu Y, Liu M, Wu G, Zhang M, Zhang X, Cui N, Yin H, Chen L. **Efficacy of once-daily glucagon-like peptide-1 receptor agonist lixisenatide as an add-on treatment to basal insulin in Asian and white adults with type 2 diabetes mellitus: An individual-level pooled analysis of phase III studies.** *J Diabetes Investig.* 2021 Jan 21. Epub ahead of print.
369. Goyal A, Gupta Y, Kubihal S, Kalaivani M, Bhatla N, Tandon N. **Utility of Screening Fasting Plasma Glucose and Glycated Hemoglobin to Circumvent the Need for Oral Glucose Tolerance Test in Women with Prior Gestational Diabetes.** *Adv Ther.* 2021 Feb;38(2):1342-1351. Epub 2021 Jan 20.
370. Yoshizawa Y, Hosojima M, Kabasawa H, Tanabe N, Ugamura D, Koda Y, Shimada H, Takasawa T, Ito T, Kitamura T, Kobayashi M, Suzuki Y, Narita I, Saito A. **Effects of the Once-Weekly DPP4 Inhibitor Omarigliptin on Glycemic Control in Patients with Type 2 Diabetes Mellitus on Maintenance Hemodialysis: A 24-Week Open-Label, Multicenter Randomized Controlled Study.** *Diabetes Ther.* 2021 Jan 20. Epub ahead of print.
371. Oliveira RV, Bernardo T, Martins S, Sequeira A. **Monogenic diabetes: a new pathogenic variant of HNF1A gene.** *BMJ Case Rep.* 2021 Jan 20;14(1):e231837.
372. Cheng Y, Zu P, Zhao J, Shi L, Shi H, Zhang M, Wang A. **Differences in initial versus recurrent diabetic foot ulcers at a specialized tertiary diabetic foot care center in China.** *J Int Med Res.* 2021 Jan;49(1):300060520987398.
373. Mehta S, Young CC, Warren MR, Akhtar S, Shefelbine SJ, Crane JD, Bajpayee AG. **Resveratrol and Curcumin Attenuate *Ex Vivo* Sugar-Induced Cartilage Glycation, Stiffening, Senescence, and Degeneration.** *Cartilage.* 2021 Jan 20:1947603520988768. Epub ahead of print.
374. Sandstedt J, Vargmar K, Björkman K, Ruetschi U, Bergström G, Hultén LM, Skiöldebrand E. **COMP (Cartilage Oligomeric Matrix Protein) Neoepitope: A Novel Biomarker to Identify Symptomatic Carotid Stenosis.** *Arterioscler Thromb Vasc Biol.* 2021 Mar;41(3):1218-1228. Epub 2021 Jan 21.
375. Zarora R, MacMillan F, Piya MK, Fernandes B, Simmons D. **Effectiveness of a locality-based integrated diabetes care service on clinical outcomes.** *Intern Med J.* 2021 Jan 20. Epub ahead of print.

376. Groenwold RHH, Palmer TM, Tilling K. **To Adjust or Not to Adjust? When a "Confounder" Is Only Measured After Exposure.** *Epidemiology*. 2021 Mar 1;32(2):194-201.
377. Tsou MT, Pai TP, Chiang TM, Huang WH, Lin HM, Lee SC. **Burnout and metabolic syndrome among different departments of medical center nurses in Taiwan-Cross-sectional study and biomarker research.** *J Occup Health*. 2021 Jan;63(1):e12188.
378. Blonde L, Rosenstock J, Frias J, Birkenfeld AL, Niemoeller E, Souhami E, Ji C, Del Prato S, Aroda VR. **Durable Effects of iGlarLixi Up to 52 Weeks in Type 2 Diabetes: The LixiLan-G Extension Study.** *Diabetes Care*. 2021 Mar;44(3):774-780. Epub 2021 Jan 19.
379. Bizzi F, Della Vedova AM, Prandi E, Cavanna D, Manfredi P. **Attachment representations to parents and emotional-behavioral problems: A comparison between children with type 1 diabetes mellitus and healthy children in middle childhood.** *Clin Child Psychol Psychiatry*. 2021 Jan 19:1359104520987871. Epub ahead of print.
380. Menini S, Iacobini C, Vitale M, Pesce C, Pugliese G. **Diabetes and Pancreatic Cancer-A Dangerous Liaison Relying on Carbonyl Stress.** *Cancers (Basel)*. 2021 Jan 16;13(2):313.
381. Beeraka NM, Bovilla VR, Doreswamy SH, Puttalingaiah S, Srinivasan A, Madhunapantula SV. **The Taming of Nuclear Factor Erythroid-2-Related Factor-2 (Nrf2) Deglycation by Fructosamine-3-Kinase (FN3K)-Inhibitors-A Novel Strategy to Combat Cancers.** *Cancers (Basel)*. 2021 Jan 14;13(2):281.
382. Ilias I, Diamantopoulos A, Pratikaki M, Botoula E, Jahaj E, Athanasiou N, Tsipilis S, Zacharis A, Vassiliou AG, Vassiliadi DA, Kotanidou A, Tsagarakis S, Dimopoulou I. **Glycemia, Beta-Cell Function and Sensitivity to Insulin in Mildly to Critically Ill Covid-19 Patients.** *Medicina (Kaunas)*. 2021 Jan 14;57(1):68.
383. Park JS, Kwon J, Choi HJ, Lee C. **Clinical effectiveness of liraglutide on weight loss in South Koreans: First real-world retrospective data on Saxenda in Asia.** *Medicine (Baltimore)*. 2021 Jan 15;100(2):e23780.
384. Wang S, Yue R, Huang X, Li L, Xu C, Liu L. **Renshen (Panax ginseng) and Huanglian (Rhizoma Coptidis) For T2DM: A protocol of systematic review and meta-analysis of randomized clinical trials.** *Medicine (Baltimore)*. 2021 Jan 15;100(2):e23743.
385. Rehder PM, Borovac-Pinheiro A, de Araujo ROMB, Diniz JAPM, Ferreira NLC, Branco ACR, Dias AF, Pereira BG. **Gestational Diabetes Mellitus and Obesity are Related to Persistent Hyperglycemia in the Postpartum Period.** *Rev Bras Ginecol Obstet*. 2021 Feb;43(2):107-112. English. Epub 2021 Jan 19.
386. Moh MC, Low S, Ng TP, Ang SF, Ang K, Sum CF, Subramaniam T, Lim SC. **Association between depressive symptoms and pulse wave velocity is mediated by increased adiposity in older adults with type 2 diabetes.** *J Psychiatry Neurosci*. 2021 Jan 18;46(1):E176-E183.
387. Harreiter J, Just I, Leutner M, Bastian M, Brath H, Schelkshorn C, Klepochova R, Krššák M, Kautzky-Willer A. **Combined exenatide and dapagliflozin has no additive effects on reduction of hepatocellular lipids despite better glycaemic control in patients with type 2 diabetes mellitus treated with metformin: EXENDA, a 24-week, prospective, randomized, placebo-controlled pilot trial.** *Diabetes Obes Metab*. 2021 Jan 19. Epub ahead of print.
388. Coates E, Amiel S, Baird W, Benaissa M, Brennan A, Campbell MJ, Chadwick P, Chater T, Choudhary P, Cooke D, Cooper C, Cross E, De Zoysa N, Eissa M, Elliott J,

- Gianfrancesco C, Good T, Hopkins D, Hui Z, Lawton J, Lorencatto F, Michie S, Pollard DJ, Rankin D, Schutter J, Scott E, Speight J, Stanton-Fay S, Taylor C, Thompson G, Totton N, Yardley L, Zaitcev A, Heller S; DAFNEplus group. **Protocol for a cluster randomised controlled trial of the DAFNEplus (Dose Adjustment For Normal Eating) intervention compared with 5x1 DAFNE: a lifelong approach to promote effective self-management in adults with type 1 diabetes.** *BMJ Open.* 2021 Jan 18;11(1):e040438.
389. Lam R, Kwon S, Riggs J, Sunseri M, Crowley G, Schwartz T, Zeig-Owens R, Colbeth H, Halpren A, Liu M, Prezant DJ, Nolan A. **Dietary phenotype and advanced glycation end-products predict WTC-obstructive airways disease: a longitudinal observational study.** *Respir Res.* 2021 Jan 18;22(1):19.
390. Jeffrey S, Samraj PI, Raj BS. **The role of alpha-lipoic acid supplementation in the prevention of diabetes complications: A comprehensive review of clinical trials.** *Curr Diabetes Rev.* 2021 Jan 18. Epub ahead of print.
391. Alsamad F, Brunel B, Vuiblet V, Gillery P, Jaisson S, Piot O. **In depth investigation of collagen non-enzymatic glycation by Raman spectroscopy.** *Spectrochim Acta A Mol Biomol Spectrosc.* 2021 Apr 15;251:119382. Epub 2020 Dec 28.
392. Jahan H, Choudhary MI. **Gliclazide alters macrophages polarization state in diabetic atherosclerosis in vitro via blocking AGE-RAGE/TLR4-reactive oxygen species-activated NF- κ B nexus.** *Eur J Pharmacol.* 2021 Mar 5;894:173874. Epub 2021 Jan 15.
393. Rattelman CR, Ciemins EL, Stempniewicz N, Mocarski M, Ganguly R, Cuddeback JK. **A Retrospective Analysis of Therapeutic Inertia in Type 2 Diabetes Management Across a Diverse Population of Health Care Organizations in the USA.** *Diabetes Ther.* 2021 Feb;12(2):581-594. Epub 2021 Jan 18.
394. Ishii H, Nakajima H, Kamei N, Uchida D, Suzuki D, Ono Y, Sato Y, Shimono D. **Comparison of Patient-Led and Physician-Led Insulin Titration in Japanese Type 2 Diabetes Mellitus Patients Based on Treatment Distress, Satisfaction, and Self-Efficacy: The COMMIT-Patient Study.** *Diabetes Ther.* 2021 Feb;12(2):595-611. Epub 2021 Jan 18.
395. Rizwee MM, Abidi M, Habib S, Mir AR, Ali A, Uddin M. **Characterization of Glyoxal Modified LDL: Role in the Generation of Circulating Autoantibodies in Type 2 Diabetes Mellitus and Coronary Artery Disease.** *Curr Drug Targets.* 2021 Jan 14. Epub ahead of print.
396. Liu Z, Zhang Y, Pan S, Qiu C, Jia H, Wang Y, Zhu H. **Activation of RAGE-dependent endoplasmic reticulum stress associates with exacerbated postmyocardial infarction ventricular arrhythmias in diabetes.** *Am J Physiol Endocrinol Metab.* 2021 Mar 1;320(3):E539-E550. Epub 2021 Jan 18.
397. Fudalej E, Justyniarska M, Kasarełło K, Dziedziak J, Szaflik JP, Cudnoch-Jędrzejewska A. **Neuroprotective factors of the retina and their role in promoting survival of retinal ganglion cells: a review.** *Ophthalmic Res.* 2021 Jan 15. Epub ahead of print.
398. Sakuma C, Tomioka Y, Li C, Shibata T, Nakagawa M, Kurosawa Y, Arakawa T, Akuta T. **Analysis of protein denaturation, aggregation and post-translational modification by agarose native gel electrophoresis.** *Int J Biol Macromol.* 2021 Mar 1;172:589-596. Epub 2021 Jan 14.
399. Janšáková K, Belica I, Rajčániová E, Rajčáni J, Kyselíková K, Celušáková H, Lazníbatová J, Ostatníková D. **The acute effect of psychosocial stress on the level of oxidative stress in children.** *Int J Psychophysiol.* 2021 Mar;161:86-90. Epub 2021 Jan 14.

400. Bergenstal RM, Nimri R, Beck RW, Criego A, Laffel L, Schatz D, Battelino T, Danne T, Weinzimer SA, Sibayan J, Johnson ML, Bailey RJ, Calhoun P, Carlson A, Isganaitis E, Bello R, Albanese-O'Neill A, Dove K, Biester T, Weyman K, Hood K, Phillip M; FLAIR Study Group. **A comparison of two hybrid closed-loop systems in adolescents and young adults with type 1 diabetes (FLAIR): a multicentre, randomised, crossover trial.** *Lancet.* 2021 Jan 16;397(10270):208-219.
401. Thieme K, Pereira BMV, da Silva KS, Fabre NT, Catanozi S, Passarelli M, Correa-Giannella ML. **Chronic advanced-glycation end products treatment induces TXNIP expression and epigenetic changes in glomerular podocytes in vivo and in vitro.** *Life Sci.* 2021 Apr 1;270:118997. Epub 2021 Jan 13.
402. Matamoros MA, Becana M. **Molecular responses of legumes to abiotic stress: protein post-translational modifications and redox signaling.** *J Exp Bot.* 2021 Jan 16:erab008. Epub ahead of print.
403. Nagore E, Martinez-Garcia MA, Gomez-Olivas JD, Manrique-Silva E, Martorell A, Bañuls J, Carrera C, Ortiz P, Gardeazabal J, Boada A, de Eusebio E, Chiner E, Gonzalez C, Pérez-Gil A, Cullen D, Formigón M, de Unamuno B, Navarro-Soriano C, Muriel A, Gozal D. **Relationship between type 2 diabetes mellitus and markers of cutaneous melanoma aggressiveness: An observational multi-centric study in 443 patients with melanoma.** *Br J Dermatol.* 2021 Jan 16. Epub ahead of print.
404. Ghosh A, Anjana RM, Shanthi Rani CS, Jeba Rani S, Gupta R, Jha A, Gupta V, Kuchay MS, Luthra A, Durrani S, Dutta K, Tyagi K, Unnikrishnan R, Srivastava BK, Ramu M, Sastry NG, Gupta PK, Umasankari G, Jayashri R, Mohan V, Misra A. **Glycemic parameters in patients with new-onset diabetes during COVID-19 pandemic are more severe than in patients with new-onset diabetes before the pandemic: NOD COVID India Study.** *Diabetes Metab Syndr.* 2021 Jan-Feb;15(1):215-220. Epub 2020 Dec 29.
405. Jeon GY, Nam MH, Lee KW. **Inhibitory effect of caffeic acid on advanced glycation end product-induced renal fibrosis in vitro: A potential therapeutic target.** *J Food Sci.* 2021 Feb;86(2):579-586. Epub 2021 Jan 14.
406. Cabré N, Gil M, Amigó N, Luciano-Mateo F, Baiges-Gaya G, Fernández-Arroyo S, Rodríguez-Tomás E, Hernández-Aguilera A, Castañé H, París M, Sabench F, Del Castillo D, Camps J, Joven J. **Laparoscopic sleeve gastrectomy alters ¹H-NMR-measured lipoprotein and glycoprotein profile in patients with severe obesity and nonalcoholic fatty liver disease.** *Sci Rep.* 2021 Jan 14;11(1):1343.
407. Shang Y, Fratiglioni L, Vetrano DL, Dove A, Welmer AK, Xu W. **Not Only Diabetes but Also Prediabetes Leads to Functional Decline and Disability in Older Adults.** *Diabetes Care.* 2021 Mar;44(3):690-698. Epub 2021 Jan 14.
408. Abels C, Soeberdt M, Kilic A, Reich H, Knie U, Jourdan C, Schramm K, Heimstaedt-Muskett S, Masur C, Szeimies RM. **A glycopyrronium bromide 1% cream for topical treatment of primary axillary hyperhidrosis: efficacy and safety results from a phase IIIa randomized controlled trial.** *Br J Dermatol.* 2021 Jan 14. Epub ahead of print.
409. Weare-Regales N, Hudey SN, Lockey RF. **Practical Guidance for Prevention and Management of Glucocorticoid-Induced Osteoporosis for the Allergist/Immunologist.** *J Allergy Clin Immunol Pract.* 2021 Jan 11:S2213-2198(21)00040-4. Epub ahead of print.
410. Joaqui VB, Gómez NB, Ortiz RC, Toro LMO, Lombo JPM, Cifuentes CAS, García MAM, Lomba AA. **Effectiveness of triple therapy with dapagliflozin add-on to dual therapy over 52 weeks in patients with uncontrolled type 2 diabetes mellitus in a centre of**

- high complexity, Cali-Colombia.** *Arch Endocrinol Metab.* 2021 Jan 14:2359-3997000000319. Epub ahead of print.
411. Alajam RA, Alqahtani AS, Moon S, Sarmento CVM, Frederick J, Smirnova IV, Liu W. **Effects of walking training on risk markers of cardiovascular disease in individuals with chronic spinal cord injury.** *J Spinal Cord Med.* 2021 Jan 14:1-9. Epub ahead of print.
412. Grigg J. **Advanced glycation end products and wheeze: a plausible association?** *Thorax.* 2021 Mar;76(3):219. Epub 2020 Dec 21.
413. Wang JG, Liu B, Kroll F, Hanson C, Vicencio A, Coca S, Uribarri J, Bose S. **Increased advanced glycation end product and meat consumption is associated with childhood wheeze: analysis of the National Health and Nutrition Examination Survey.** *Thorax.* 2021 Mar;76(3):292-294. Epub 2020 Dec 21.
414. Sia HK, Kor CT, Tu ST, Liao PY, Wang JY. **Self-monitoring of blood glucose in association with glycemic control in newly diagnosed non-insulin-treated diabetes patients: a retrospective cohort study.** *Sci Rep.* 2021 Jan 13;11(1):1176.
415. Kameyama M, Okumiya T, Tokuhira S, Matsumura Y, Matsui H, Ono Y, Iwasaka T, Hiratani K, Koga M. **Estimation of the hemoglobin glycation rate constant.** *Sci Rep.* 2021 Jan 13;11(1):986.
416. Islam Z, Akter S, Inoue Y, Hu H, Kuwahara K, Nakagawa T, Honda T, Yamamoto S, Okazaki H, Miyamoto T, Ogasawara T, Sasaki N, Uehara A, Yamamoto M, Kochi T, Eguchi M, Shirasaka T, Shimizu M, Nagahama S, Hori A, Imai T, Nishihara A, Tomita K, Sone T, Konishi M, Kabe I, Mizoue T, Dohi S; Japan Epidemiology Collaboration on Occupational Health Study Group. **Prediabetes, Diabetes, and the Risk of All-Cause and Cause-Specific Mortality in a Japanese Working Population: Japan Epidemiology Collaboration on Occupational Health Study.** *Diabetes Care.* 2021 Mar;44(3):757-764. Epub 2021 Jan 13.
417. Goldenberg JZ, Day A, Brinkworth GD, Sato J, Yamada S, Jönsson T, Beardsley J, Johnson JA, Thabane L, Johnston BC. **Efficacy and safety of low and very low carbohydrate diets for type 2 diabetes remission: systematic review and meta-analysis of published and unpublished randomized trial data.** *BMJ.* 2021 Jan 13;372:m4743.
418. Dennis JK, Sealock JM, Straub P, Lee YH, Hucks D, Actkins K, Faucon A, Feng YA, Ge T, Goleva SB, Niarchou M, Singh K, Morley T, Smoller JW, Ruderfer DM, Mosley JD, Chen G, Davis LK. **Clinical laboratory test-wide association scan of polygenic scores identifies biomarkers of complex disease.** *Genome Med.* 2021 Jan 13;13(1):6.
419. Muraki M, Kunita Y, Shirahase K, Yamazaki R, Hanada S, Sawaguchi H, Tohda Y. **A randomized controlled trial of long-acting muscarinic antagonist and long-acting β_2 agonist fixed-dose combinations in patients with chronic obstructive pulmonary disease.** *BMC Pulm Med.* 2021 Jan 13;21(1):26.
420. Wikström K, Lamidi ML, Rautiainen P, Tirkkonen H, Kivinen P, Laatikainen T. **The effect of the integration of health services on health care usage among patients with type 2 diabetes in North Karelia, Finland.** *BMC Health Serv Res.* 2021 Jan 13;21(1):65.
421. Cambras T, Romero O, Díez-Noguera A, Lecube A, Sampol G. **Circadian Patterns of Patients with Type 2 Diabetes and Obstructive Sleep Apnea.** *J Clin Med.* 2021 Jan 11;10(2):244.

422. Stern AJ, Speidel L, Zaitlen NA, Nielsen R. **Disentangling selection on genetically correlated polygenic traits via whole-genome genealogies.** *Am J Hum Genet.* 2021 Feb 4;108(2):219-239. Epub 2021 Jan 12.
423. Al-Ani B, Alzamil NM, Hewett PW, Al-Hashem F, Bin-Jaliah I, Shatoor AS, Kamar SS, Latif NSA, Haidara MA, Dawood AF. **Metformin ameliorates ROS-p53-collagen axis of fibrosis and dyslipidemia in type 2 diabetes mellitus- induced left ventricular injury.** *Arch Physiol Biochem.* 2021 Jan 13:1-7. Epub ahead of print.
424. Huang HZ, Qiu M, Lin JZ, Li MQ, Ma XT, Ran F, Luo CH, Wei XC, Xu RC, Tan P, Fan SH, Yang M, Han L, Zhang DK. **Potential effect of tropical fruits *Phyllanthus emblica* L. for the prevention and management of type 2 diabetic complications: a systematic review of recent advances.** *Eur J Nutr.* 2021 Jan 13. Epub ahead of print.
425. Heymsfield SB, Coleman LA, Miller R, Rooks DS, Laurent D, Petricoul O, Praestgaard J, Swan T, Wade T, Perry RG, Goodpaster BH, Roubenoff R. **Effect of Bimagrumab vs Placebo on Body Fat Mass Among Adults With Type 2 Diabetes and Obesity: A Phase 2 Randomized Clinical Trial.** *JAMA Netw Open.* 2021 Jan 4;4(1):e2033457.
426. Gelžinský J, Mayer O Jr, Seidlerová J, Mateřánková M, Mareš Š, Kordíková V, Trefil L, Cífková R, Filipovský J. **Serum biomarkers, skin autofluorescence and other methods. Which parameter better illustrates the relationship between advanced glycation end products and arterial stiffness in the general population?** *Hypertens Res.* 2021 Jan 12. Epub ahead of print.
427. Chan KW, Kwong ASK, Tsui PN, Cheung SCY, Chan GCW, Choi WF, Yiu WH, Zhang Y, Wong MM, Zhang ZJ, Tan KCB, Lao L, Tang SCW. **Efficacy, safety and response predictors of adjuvant astragalus for diabetic kidney disease (READY): study protocol of an add-on, assessor-blind, parallel, pragmatic randomised controlled trial.** *BMJ Open.* 2021 Jan 12;11(1):e042686.
428. Valdes DS, So D, Gill PA, Kellow NJ. **Effect of Dietary Acetic Acid Supplementation on Plasma Glucose, Lipid Profiles, and Body Mass Index in Human Adults: A Systematic Review and Meta-analysis.** *J Acad Nutr Diet.* 2021 Jan 9:S2212-2672(20)31529-X. Epub ahead of print.
429. Boersma HE, van Waateringe RP, van der Klauw MM, Graaff R, Paterson AD, Smit AJ, Wolffenbittel BHR. **Skin autofluorescence predicts new cardiovascular disease and mortality in people with type 2 diabetes.** *BMC Endocr Disord.* 2021 Jan 12;21(1):14.
430. Bekkelund SI. **Serum alanine aminotransferase activity and risk factors for cardiovascular disease in a Caucasian population: the Tromsø study.** *BMC Cardiovasc Disord.* 2021 Jan 13;21(1):29.
431. Diri H, Aycicek B. **A retrospective comparison between intensive and non- intensive insulin regimens in type 2 diabetes mellitus.** *Minerva Endocrinol.* 2021 Jan 12. Epub ahead of print.
432. Heinz A. **Elastic fibers during aging and disease.** *Ageing Res Rev.* 2021 Mar;66:101255. Epub 2021 Jan 9. P
433. Tang Y, Kong J, Zhou B, Wang X, Liu X, Wang Y, Zhu S. **Mesenteric Lymph Duct Ligation Alleviates Acute Lung Injury Caused by Severe Acute Pancreatitis Through Inhibition of High Mobility Group Box 1-Induced Inflammation in Rats.** *Dig Dis Sci.* 2021 Jan 12. Epub ahead of print.
434. Pariser DM, Lain EL, Mamelok RD, Drew J, Mould DR. **Limited Systemic Exposure with Topical Glycopyrronium Tosylate in Primary Axillary Hyperhidrosis.** *Clin Pharmacokinet.* 2021 Jan 12. Epub ahead of print.

435. Yuan YS, Yu F, Zhang YJ, Niu SP, Xu HL, Kou YH. **Changes in proteins related to early nerve repair in a rat model of sciatic nerve injury.** *Neural Regen Res.* 2021 Aug;16(8):1622-1627.
436. García-Martínez BI, Ruiz-Ramos M, Pedraza-Chaverri J, Santiago-Osorio E, Mendoza-Núñez VM. **Hypoglycemic Effect of Resveratrol: A Systematic Review and Meta-Analysis.** *Antioxidants (Basel).* 2021 Jan 7;10(1):69.
437. Zhou Y, Li H, Luo L, Chen Y, Chen Q, Bian W, Yang Y, Tang J. **Acupoint injection therapy for diabetic retinopathy: A protocol for systematic review and meta-analysis.** *Medicine (Baltimore).* 2021 Jan 8;100(1):e24119.
438. Chen MB, Wang H, Zheng QH, Xu HL, Cui WY. **Effect of sodium-dependent glucose transporter inhibitors on glycated hemoglobin A1c after 24 weeks in patients with diabetes mellitus: A systematic review and meta-analysis.** *Medicine (Baltimore).* 2021 Jan 8;100(1):e24101.
439. van Dongen KCW, van der Zande M, Bruyneel B, Vervoort JJM, Rietjens IMCM, Belzer C, Beekmann K. **An in vitro model for microbial fructoselysine degradation shows substantial interindividual differences in metabolic capacities of human fecal slurries.** *Toxicol In Vitro.* 2021 Apr;72:105078. Epub 2021 Jan 8.
440. Liu G, Yan D, Yang L, Sun Y, Zhan L, Lu L, Jin Z, Zhang C, Long P, Chen J, Yuan Q. **The effect of miR-471-3p on macrophage polarization in the development of diabetic cardiomyopathy.** *Life Sci.* 2021 Mar 1;268:118989. Epub 2021 Jan 5.
441. Lhota G, Sissolak B, Striedner G, Sommeregger W, Vorauer-Uhl K. **Quantification of glycated IgG in CHO supernatants: A practical approach.** *Biotechnol Prog.* 2021 Jan 11:e3124. Epub ahead of print.
442. Edinburgh RM, Koumanov F, Gonzalez JT. **Impact of pre-exercise feeding status on metabolic adaptations to endurance-type exercise training.** *J Physiol.* 2021 Jan 11. Epub ahead of print.
443. Karimi E, Hatami E, Ghavami A, Hadi A, Darand M, Askari G. **Effects of L-arginine supplementation on biomarkers of glycemic control: a systematic review and meta-analysis of randomised clinical trials.** *Arch Physiol Biochem.* 2021 Jan 10:1-11. Epub ahead of print.
444. Alqahtani AS, Li KM, Razmovski-Naumovski V, Kam A, Alam P, Li GQ. **Attenuation of methylglyoxal-induced glycation and cellular dysfunction in wound healing by *Centella cordifolia*.** *Saudi J Biol Sci.* 2021 Jan;28(1):813-824. Epub 2020 Nov 11.
445. Taneera J, Awadallah S, Khader Mohammed A, Unnikannan H, Sulaiman N. **Vitamin A levels are decreased but not influenced by glucose- or lipid-lowering medications in subjects with type 2 diabetes.** *Saudi J Biol Sci.* 2021 Jan;28(1):572-577. Epub 2020 Nov 2.
446. Ni Z, Lin X, Wen Q, Kintoko, Zhang S, Huang J, Xu X, Huang R. **Effect of 2-dodecyl-6-methoxycyclohexa-2, 5-diene-1, 4-dione, isolated from *Averrhoa carambola* L. (Oxalidaceae) roots, on advanced glycation end-product-mediated renal injury in type 2 diabetic KKAY mice.** *Toxicol Lett.* 2021 Mar 15;339:88-96. Epub 2021 Jan 7.
447. Capehorn M, Hallén N, Baker-Knight J, Glah D, Hunt B. **Evaluating the Cost-Effectiveness of Once-Weekly Semaglutide 1 mg Versus Empagliflozin 25 mg for Treatment of Patients with Type 2 Diabetes in the UK Setting.** *Diabetes Ther.* 2021 Feb;12(2):537-555. Epub 2021 Jan 9.
448. BİngÜl İ, Aydın AF, KÜÇÜkgergİN C, DoĞan Ekİcİ AI, AbbasoĞlu S, Uysal MM. **The effect of 1,25-dihydroxyvitamin D3 on liver damage, oxidative stress and advanced**

- glycation end products in experimental nonalcoholic- and alcoholic- fatty liver disease. *Turk J Med Sci.* 2021 Jan 10. Epub ahead of print.
449. Xin GJ, Zhao YW, Li LM, Jia FF, Han X, Li L, Guo H, Meng HX, Fu JH, Liu JX. **Mechanism of 'Invigorating Qi and Promoting Blood Circulation' Drug Pair Ginseng-Danshen on Treatment of Ischemic Heart Disease Based on Network Pharmacology.** *Chin J Integr Med.* 2021 Jan 9. Epub ahead of print.
450. Gebrie D, Getnet D, Manyazewal T. **Cardiovascular safety and efficacy of metformin-SGLT2i versus metformin-sulfonylureas in type 2 diabetes: systematic review and meta-analysis of randomized controlled trials.** *Sci Rep.* 2021 Jan 8;11(1):137.
451. Cho KY, Nomoto H, Nakamura A, Kawata S, Sugawara H, Takeuchi J, Nagai S, Omori K, Tsuchida K, Miya A, Shigesawa I, Tsuchida K, Yanagiya S, Kameda H, Yokoyama H, Taneda S, Kurihara Y, Aoki S, Nishimoto N, Atsumi T, Miyoshi H. **Improved time in range and postprandial hyperglycemia with canagliflozin in combination with teneligliptin: Secondary analyses of the CALMER study.** *J Diabetes Investig.* 2021 Jan 9. Epub ahead of print.
452. Zhang H, Zhang Y, Chen X, Li J, Zhang Z, Yu H. **Effects of statins on cytokines levels in gingival crevicular fluid and saliva and on clinical periodontal parameters of middle-aged and elderly patients with type 2 diabetes mellitus.** *PLoS One.* 2021 Jan 8;16(1):e0244806.
453. Chen J, Mooldijk SS, Licher S, Waqas K, Ikram MK, Uitterlinden AG, Zillikens MC, Ikram MA. **Assessment of Advanced Glycation End Products and Receptors and the Risk of Dementia.** *JAMA Netw Open.* 2021 Jan 4;4(1):e2033012.
454. Kitazawa M, Katagiri T, Suzuki H, Matsunaga S, H Yamada M, Ikarashi T, Yamamoto M, Furukawa K, Iwanaga M, Hatta M, Fujihara K, Yamada T, Tanaka S, Sone H. **A 52-week randomized controlled trial of ipragliflozin or sitagliptin in type 2 diabetes combined with metformin: The N-ISM study.** *Diabetes Obes Metab.* 2021 Mar;23(3):811-821.
455. Pringle NA, van de Venter M, Koekemoer TC. **Comprehensive *in vitro* antidiabetic screening of *Aspalathus linearis* using a target-directed screening platform and cellomics.** *Food Funct.* 2021 Feb 15;12(3):1020-1038.
456. Mathiesen AS, Rothmann MJ, Zoffmann V, Jakobsen JC, Gluud C, Lindschou J, Due-Christensen M, Rasmussen B, Marqvorsen E, Thomsen T. **Self-determination theory interventions versus usual care in people with diabetes: a protocol for a systematic review with meta-analysis and trial sequential analysis.** *Syst Rev.* 2021 Jan 7;10(1):12.
457. Inoue S, Vaidya S, Tillmann HC, Sakita Y, Machineni S, Heudi O, Furihata K. **Pharmacokinetics of indacaterol, glycopyrronium and mometasone furoate administered as an inhaled fixed-dose combination in Japanese and Caucasian healthy subjects.** *BMC Pulm Med.* 2021 Jan 7;21(1):18.
458. Rajgopal RK, Kochhar RS. **Efficacy and cardiovascular safety of Metformin.** *Curr Drug Saf.* 2021 Jan 6. Epub ahead of print.
459. de Melo FTC, Felício KM, de Queiroz NNM, de Rider Brito HA, Neto JFA, Janaú LC, de Souza Neto NJK, Silva ALA, de Lemos MN, de Oliveira MCNI, de Alcântara AL, de Moraes LV, de Souza ÍJA, Said NM, da Silva WM, de Lemos GN, Dos Santos MC, De Souza D Albuquerque Silva L, Motta ARB, de Figueiredo PBB, de Souza ACCB, Piani PPF, Felício JS. **High-dose Vitamin D Supplementation on type 1 Diabetes Mellitus Patients: is there an Improvement in Glycemic Control?** *Curr Diabetes Rev.* 2021 Jan 5. Epub ahead of print.

460. Almengló C, Rodriguez-Ruiz E, Alvarez E, López-Lago A, González-Juanatey JR, Garcia-Allut JL. **Minimal invasive fluorescence methods to quantify advanced glycation end products (AGEs) in skin and plasma of humans.** *Methods*. 2021 Jan 4:S1046-2023(20)30273-5. Epub ahead of print.
461. Huang Y, Liu HM, Wu LL, Yu GY, Xiang RL. **Long non-coding RNA and mRNA profile analysis in the parotid gland of mouse with type 2 diabetes.** *Life Sci*. 2021 Mar 1;268:119009. Epub 2021 Jan 4.
462. Arab HH, Al-Shorbagy MY, Saad MA. **Activation of autophagy and suppression of apoptosis by dapagliflozin attenuates experimental inflammatory bowel disease in rats: Targeting AMPK/mTOR, HMGB1/RAGE and Nrf2/HO-1 pathways.** *Chem Biol Interact*. 2021 Feb 1;335:109368. Epub 2021 Jan 4.
463. Watanabe T, Temma Y, Okada J, Yamada E, Saito T, Osaki A, Shimda Y, Matsumoto S, Horiguchi K, Ishida E, Kondo Y, Okada K, Takamizawa T, Nakajima Y, Ozawa A, Okada S, Horigome M, Yamada M. **In patients with type 2 diabetes the presence of Hashimoto's thyroiditis reduces the beneficial effect of dipeptidyl peptidase-4 inhibitor on plasma glucose control.** *Endocr J*. 2021 Jan 7. Epub ahead of print.
464. Bury JJ, Chambers A, Heath PR, Ince PG, Shaw PJ, Matthews FE, Brayne C, Simpson JE, Wharton SB; Cognitive Function and Ageing Study. **Type 2 diabetes mellitus-associated transcriptome alterations in cortical neurones and associated neurovascular unit cells in the ageing brain.** *Acta Neuropathol Commun*. 2021 Jan 6;9(1):5.
465. Wojtkowska A, Zapolski T, Wysokińska-Miszczuk J, Wysokiński AP. **The inflammation link between periodontal disease and coronary atherosclerosis in patients with acute coronary syndromes: case-control study.** *BMC Oral Health*. 2021 Jan 6;21(1):5.
466. Chiu TT, Tsai TL, Su MY, Yang T, Tseng PL, Lee YJ, Lee CH. **The Related Risk Factors of Diabetic Retinopathy in Elderly Patients with Type 2 Diabetes Mellitus: A Hospital-Based Cohort Study in Taiwan.** *Int J Environ Res Public Health*. 2021 Jan 4;18(1):307.
467. Dremin V, Marcinkevics Z, Zherebtsov E, Popov A, Grabovskis A, Kronberga H, Geldnere K, Doronin A, Meglinski I, Bykov A. **Skin complications of diabetes mellitus revealed by polarized hyperspectral imaging and machine learning.** *IEEE Trans Med Imaging*. 2021 Jan 6;PP. Epub ahead of print.
468. Monroy-Iglesias MJ, Russell B, Crawley D, Allen NE, Travis RC, Perez-Cornago A, Van Hemelrijck M, Beckmann K. **Metabolic syndrome biomarkers and prostate cancer risk in the UK Biobank.** *Int J Cancer*. 2021 Feb 15;148(4):825-834. Epub 2020 Sep 11.
469. Amare H, Olsen MF, Friis H, Andersen ÅB, Abdissa A, Yilma D, Girma T, Faurholt-Jepsen D. **Predictors of glucose metabolism and blood pressure among Ethiopian individuals with HIV/AIDS after one-year of antiretroviral therapy.** *Trop Med Int Health*. 2021 Jan 6. Epub ahead of print.
470. Venkateswaran M, Jayabal S, Hemaiswarya S, Murugesan S, Enkateswara S, Doble M, Periyasamy S. **Polyphenol-rich Indian ginger cultivars ameliorate GLUT4 activity in C2C12 cells, inhibit diabetes-related enzymes and LPS-induced inflammation: An in vitro study.** *J Food Biochem*. 2021 Feb;45(2):e13600. Epub 2021 Jan 5.
471. Quan W, Jiao Y, Xue C, Li Y, Liu G, He Z, Qin F, Zeng M, Chen J. **The Effect of Exogenous Free ϵ -(Carboxymethyl)Lysine on Diabetic-Model Goto-Kakizaki Rats: Metabolomics Analysis in Serum and Urine.** *J Agric Food Chem*. 2021 Jan 20;69(2):783-793.

472. Zhang X, Yue X, Ma B, Fu X, Ren H, Ma M. **Ultrasonic pretreatment enhanced the glycation of ovotransferrin and improved its antibacterial activity.** *Food Chem.* 2021 Jun 1;346:128905.
473. Chen JY, Yen GC, Tsai NT, Lin JA. **Risk and Benefit of Natural and Commercial Dark Brown Sugars as Evidenced by Phenolic and Maillard Reaction Product Contents.** *J Agric Food Chem.* 2021 Jan 20;69(2):767-775.
474. Mukherjee TK, Malik P, Hoidal JR. **Receptor for Advanced Glycation End Products (RAGE) and Its Polymorphic Variants as Predictive Diagnostic and Prognostic Markers of NSCLCs: a Perspective.** *Curr Oncol Rep.* 2021 Jan 5;23(1):12.
475. Jia X, Xuan L, Dai H, Zhu W, Deng C, Wang T, Li M, Zhao Z, Xu Y, Lu J, Bi Y, Wang W, Chen Y, Xu M, Ning G. **Fruit intake, genetic risk and type 2 diabetes: a population-based gene-diet interaction analysis.** *Eur J Nutr.* 2021 Jan 5. Epub ahead of print.
476. Davanzo MR, Crisma AR, Braga TT, Masi LN, do Amaral CL, Leal VNC, de Lima DS, Patente TA, Barbuto JA, Corrêa-Giannella ML, Lauterbach M, Kolbe CC, Latz E, Camara NOS, Pontillo A, Curi R. **Macrophage inflammatory state in Type 1 diabetes: triggered by NLRP3/iNOS pathway and attenuated by docosahexaenoic acid.** *Clin Sci (Lond).* 2021 Jan 15;135(1):19-34.
477. Davidson MB, Davidson SJ. **Effective use of computerized insulin dose adjustment algorithms on continuous glucose monitoring results by a clinical pharmacist - Proof-of-concept.** *J Diabetes.* 2021 Jan 5. Epub ahead of print.
478. Garay-Sevilla ME, Gomez-Ojeda A, González I, Luévano-Contreras C, Rojas A. **Contribution of RAGE axis activation to the association between metabolic syndrome and cancer.** *Mol Cell Biochem.* 2021 Mar;476(3):1555-1573.
479. Katakami N, Mita T, Yoshii H, Shiraiwa T, Yasuda T, Okada Y, Torimoto K, Umayahara Y, Kaneto H, Osonoi T, Yamamoto T, Kuribayashi N, Maeda K, Yokoyama H, Kosugi K, Ohtoshi K, Hayashi I, Sumitani S, Tsugawa M, Ryomoto K, Taki H, Nakamura T, Kawashima S, Sato Y, Watada H, Shimomura I; UTOPIA study investigators. **Effect of tofogliflozin on arterial stiffness in patients with type 2 diabetes: prespecified sub-analysis of the prospective, randomized, open-label, parallel-group comparative UTOPIA trial.** *Cardiovasc Diabetol.* 2021 Jan 4;20(1):4.
480. Xu Y, Grimsmann JM, Karges B, Hofer SE, Danne T, Holl RW, Ajjan RA, Dunn TD. **Personal glycation factors and calculated HbA1c for diabetes management: Real-world data from the DPV registry.** *Diabetes Technol Ther.* 2021 Jan 4. Epub ahead of print.
481. Syeda T, Cannon JR. **Environmental exposures and the etiopathogenesis of Alzheimer's disease: The potential role of BACE1 as a critical neurotoxic target.** *J Biochem Mol Toxicol.* 2021 Jan 4:e22694. Epub ahead of print.
482. Horikawa T, Hiramoto K, Goto K, Sekijima H, Ooi K. **Differences in the mechanism of type 1 and type 2 diabetes-induced skin dryness by using model mice.** *Int J Med Sci.* 2021 Jan 1;18(2):474-481.
483. Takino JI, Sato T, Nagamine K, Sakasai-Sakai A, Takeuchi M, Hori T. **Suppression of Hepatic Stellate Cell Death by Toxic Advanced Glycation End-Products.** *Biol Pharm Bull.* 2021;44(1):112-117.
484. Anwar S, Khan S, Almatroudi A, Khan AA, Alsahli MA, Almatroodi SA, Rahmani AH. **A review on mechanism of inhibition of advanced glycation end products formation by plant derived polyphenolic compounds.** *Mol Biol Rep.* 2021 Jan;48(1):787-805. Epub 2021 Jan 3.

485. Cheng X, Liu L, Li L, Zhao H, Li J, Shi J, Zhang W. **Significance of CHA₂DS₂-VAS_C on the severity and hemorrhagic transformation in patients with non-valvular atrial fibrillation-induced acute ischemic stroke.** *Intern Emerg Med.* 2021 Jan 1. Epub ahead of print.
486. Rojubally S, Simoneau A, Monlun M, Foussard N, Blanco L, Domenge F, Mohammedi K, Ducasse E, Caradu C, Rigalleau V. **For diabetic type 1 patients, the skin autofluorescence predicts ulcers and amputations.** *J Diabetes Complications.* 2021 Mar;35(3):107808. Epub 2020 Nov 27.
487. Khettar S, Viprey M, Haesebaert J, Jacquin-Courtois S, Luauté J, Mechtouff L, Derex L, Rode G, Dussart C, Janoly-Dumenil A. **Stroke patients' support: evaluation of knowledge, practices and training needs of French community pharmacists.** *Int J Clin Pharm.* 2021 Jan 2. Epub ahead of print.
488. Sofronova AA, Pozdyshev DV, Barinova KV, Muronetz VI, Semenyuk PI. **Glycation of glyceraldehyde-3-phosphate dehydrogenase inhibits the binding with α -synuclein and RNA.** *Arch Biochem Biophys.* 2021 Feb 15;698:108744. Epub 2020 Dec 29.
489. Tuleta I, Frangogiannis NG. **Diabetic fibrosis.** *Biochim Biophys Acta Mol Basis Dis.* 2021 Apr 1;1867(4):166044. Epub 2020 Dec 28.
490. Chin-Jung L, Hsiao-Yean C, Yeu-Hui C, Kuan-Chia L, Hui-Chuan H. **Effects of mobile health interventions on improving glycemic stability and quality of life in patients with type 1 diabetes: A meta-analysis.** *Res Nurs Health.* 2021 Feb;44(1):187-200. Epub 2020 Dec 25.
491. Kalra S, Shaikh S, Priya G, Baruah MP, Verma A, Das AK, Shah M, Das S, Khandelwal D, Sanyal D, Ghosh S, Saboo B, Bantwal G, Ayyagari U, Gardner D, Jimeno C, Barbary NE, Hafidh KA, Bhattarai J, Minulj TT, Zufry H, Bulugahapitiya U, Murad M, Tan A, Shahjada S, Bello MB, Katulanda P, Podgorski G, AbuHelaiqa WI, Tan R, Latheef A, Govender S, Assaad-Khalil SH, Kootin-Sanwu C, Joshi A, Pathan F, Nkansah DA. **Individualizing Time-in-Range Goals in Management of Diabetes Mellitus and Role of Insulin: Clinical Insights From a Multinational Panel.** *Diabetes Ther.* 2021 Feb;12(2):465-485.
492. Jain AB, Kanters S, Khurana R, Kisseck J, Severin N, Stafford SG. **Real- World Effectiveness Analysis of Switching From Liraglutide or Dulaglutide to Semaglutide in Patients With Type 2 Diabetes Mellitus: The Retrospective REALISE-DM Study.** *Diabetes Ther.* 2021 Feb;12(2):527-536.
493. Kerby A, Shingleton D, Batra G, Sharps MC, Baker BC, Heazell AEP. **Placental Morphology and Cellular Characteristics in Stillbirths in Women With Diabetes and Unexplained Stillbirths.** *Arch Pathol Lab Med.* 2021 Jan 1;145(1):82-89.
494. Wang YY, Yan Q, Huang ZT, Zou Q, Li J, Yuan MH, Wu LQ, Cai ZY. **Ameliorating Ribosylation-Induced Amyloid- β Pathology by Berberine via Inhibiting mTOR/p70S6K Signaling.** *J Alzheimers Dis.* 2021;79(2):833-844.
495. Bekele BB, Negash S, Bogale B, Tesfaye M, Getachew D, Weldekidan F, Balcha B. **Effect of diabetes self-management education (DSME) on glycated hemoglobin (HbA1c) level among patients with T2DM: Systematic review and meta-analysis of randomized controlled trials.** *Diabetes Metab Syndr.* 2021 Jan-Feb;15(1):177-185.
496. Shi C, Tingting W, Li JP, Sullivan MA, Wang C, Wang H, Deng B, Zhang Y. **Comprehensive Landscape of Heparin Therapy for COVID-19.** *Carbohydr Polym.* 2021 Feb 15;254:117232.

497. Bi X, Song Y, Song Y, Yuan J, Cui J, Zhao S, Qiao S. **Collagen Cross-Linking Is Associated With Cardiac Remodeling in Hypertrophic Obstructive Cardiomyopathy.** *J Am Heart Assoc.* 2021 Jan 5;10(1):e017752.
498. Wasana KGP, Attanayake AP, Weerathna TP, Jayatilaka KAPW. **Efficacy and safety of a herbal drug of *Coccinia grandis* (Linn.) Voigt in patients with type 2 diabetes mellitus: A double blind randomized placebo controlled clinical trial.** *Phytomedicine.* 2021 Jan;81:153431.
499. Neff LS, Bradshaw AD. **Cross your heart? Collagen cross-links in cardiac health and disease.** *Cell Signal.* 2021 Mar;79:109889.
500. Wang L, Zhang Y, Liu X, Zhao X, Ouyang Y, Qiu G, Lv W, Zheng F, Wang Q, Lu X, Peng X, Wu T, Lehmann R, Wang C, Jia W, Xu G. **Metabolite Triplet in Serum Improves the Diagnostic Accuracy of Prediabetes and Diabetes Screening.** *J Proteome Res.* 2021 Jan 1;20(1):1005-1014. Epub 2020 Dec 21.
501. Qais FA, Sarwar T, Ahmad I, Khan RA, Shahzad SA, Husain FM. **Glyburide inhibits non-enzymatic glycation of HSA: An approach for the management of AGEs associated diabetic complications.** *Int J Biol Macromol.* 2021 Feb 1;169:143-152. Epub 2020 Dec 16.
502. Anthony-Regnitz CM, Wilson AE, Sweazea KL, Braun EJ. **Correction to: Fewer Exposed Lysine Residues May Explain Relative Resistance of Chicken Serum Albumin to In Vitro Protein Glycation in Comparison to Bovine Serum Albumin.** *J Mol Evol.* 2021 Feb;89(1-2):117.
503. Murtaza G, Rizvi AS, Irfan M, Li L, Qu F. **Determination of glycated albumin in serum and saliva by capillary electrophoresis utilizing affinity of 3-acrylamido phenylboronic acid selected by virtual screening and molecular docking.** *J Chromatogr A.* 2021 Jan 11;1636:461793. Epub 2020 Dec 10.
504. Zhao X, Xu X, Zhou G. **Covalent chemical modification of myofibrillar proteins to improve their gelation properties: A systematic review.** *Compr Rev Food Sci Food Saf.* 2021 Jan;20(1):924-959. Epub 2020 Dec 19.
505. Al-Ozairi E, Alsaed D, Alroushan D, Voase N, Hasan A, Gill JMR, Sattar N, Welsh P, Gray CM, Boonpor J, Celis-Morales C, Gray SR. **Skeletal Muscle and Metabolic Health: How Do We Increase Muscle Mass and Function in People with Type 2 Diabetes?** *J Clin Endocrinol Metab.* 2021 Jan 23;106(2):309-317.
506. Rasouli N, Younes N, Utzschneider KM, Inzucchi SE, Balasubramanyam A, Cherrington AL, Ismail-Beigi F, Cohen RM, Olson DE, DeFronzo RA, Herman WH, Lachin JM, Kahn SE; GRADE Research Group. **Association of Baseline Characteristics With Insulin Sensitivity and β -Cell Function in the Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness (GRADE) Study Cohort.** *Diabetes Care.* 2021 Feb;44(2):340-349. Epub 2020 Dec 17.
507. Johnson LL, Johnson J, Ober R, Holland A, Zhang G, Backer M, Backer J, Ali Z, Tekabe Y. **Novel Receptor for Advanced Glycation End Products-Blocking Antibody to Treat Diabetic Peripheral Artery Disease.** *J Am Heart Assoc.* 2021 Jan 5;10(1):e016696. Epub 2020 Dec 17.
508. Vangoitsenhoven R, Wilson RL, Cherla DV, Tu C, Kashyap SR, Cummings DE, Schauer PR, Aminian A. **Presence of Liver Steatosis Is Associated With Greater Diabetes Remission After Gastric Bypass Surgery.** *Diabetes Care.* 2021 Feb;44(2):321-325. Epub 2020 Dec 15.

509. Calvo-Hueros JI, Martín-Hidalgo-Barquero MV, Morales-Gabardino JA, Buitrago F. **Chronic kidney disease prevalence and cardiovascular risk in a cohort of patients with type 2 diabetes followed for 10 years in Badajoz (Spain). An observational study.** *Prim Care Diabetes*. 2021 Apr;15(2):391-396. Epub 2020 Dec 13.
510. Lima CHR, Layanne LCCL, Nogueira NDN, Rodrigues GP, Frota KMG, Teixeira NDSCCA, Oliveira IKF, Paiva AA. **Effects of vitamin D supplementation on the glycemic control of pre-diabetic individuals: a systematic review.** *Nutr Hosp*. 2021 Feb 23;38(1):186-193. English.
511. Momeni Z, Neapetung J, Pacholko A, Kiir TAB, Yamamoto Y, Bekar LK, Campanucci VA Dr. **Hyperglycemia induces RAGE-dependent hippocampal spatial memory impairments.** *Physiol Behav*. 2021 Feb 1;229:113287. Epub 2020 Dec 11.
512. Xu J, Zhong Z, Deng Y. **Unexpected HbA_{1c} results in the presence of three rare hemoglobin variants.** *Scand J Clin Lab Invest*. 2021 Feb;81(1):59-64. Epub 2020 Dec 14.
513. Khalifa I, Zhu W, Nawaz A, Li K, Li C. **Microencapsulated mulberry anthocyanins promote the in vitro-digestibility of whey proteins in glycated energy-ball models.** *Food Chem*. 2021 May 30;345:128805.
514. Shi J, Fu Y, Zhao XH, Lametsch R. **Glycation sites and bioactivity of lactose-glycated caseinate hydrolysate in lipopolysaccharide-injured IEC-6 cells.** *J Dairy Sci*. 2021 Feb;104(2):1351-1363. Epub 2020 Dec 11.
515. Bryk AH, Zettl K, Wiśniewski JR, Undas A. **Glycation and acetylation sites on fibrinogen in plasma fibrin clot of patients with type 2 diabetes: Effects of low-dose acetylsalicylic acid.** *Thromb Res*. 2021 Feb;198:93-98. Epub 2020 Nov 28.
516. Rellmann Y, Eidhof E, Dreier R. **Review: ER stress-induced cell death in osteoarthritic cartilage.** *Cell Signal*. 2021 Feb;78:109880. Epub 2020 Dec 8.
517. Hassanein MM, Hanif W, Malek R, Jabbar A. **Changes in fasting patterns during Ramadan, and associated clinical outcomes in adults with type 2 diabetes: A narrative review of epidemiological studies over the last 20 years.** *Diabetes Res Clin Pract*. 2021 Feb;172:108584. Epub 2020 Dec 8.
518. Liu Y, Zhang H, Wang S, Guo Y, Fang X, Zheng B, Gao W, Yu H, Chen Z, Roman RJ, Fan F. **Reduced pericyte and tight junction coverage in old diabetic rats are associated with hyperglycemia-induced cerebrovascular pericyte dysfunction.** *Am J Physiol Heart Circ Physiol*. 2021 Feb 1;320(2):H549-H562. Epub 2020 Dec 11.
519. Kong LR, Zhang Y, Wu F, Wen XQ, He DH, Zhou CQ, Wang L. **Correlation between glycosylated serum albumin and glycosylated haemoglobin in the southwest Chinese population: Establishment of a regression model.** *J Diabetes Complications*. 2021 Feb;35(2):107796. Epub 2020 Nov 26.
520. Belsare S, Coté G. **Development of a colorimetric paper fluidic dipstick assay for measurement of glycated albumin to monitor gestational diabetes at the point-of-care.** *Talanta*. 2021 Feb 1;223(Pt 1):121728. Epub 2020 Oct 4.
521. Lima Júnior JP, Franco RR, Saraiva AL, Moraes IB, Espindola FS. **Anacardium humile St. Hil as a novel source of antioxidant, antiglycation and α -amylase inhibitors molecules with potential for management of oxidative stress and diabetes.** *J Ethnopharmacol*. 2021 Mar 25;268:113667. Epub 2020 Dec 7.
522. Grigoriadis A, Räisänen IT, Pärnänen P, Tervahartiala T, Sorsa T, Sakellari D. **Prediabetes/diabetes screening strategy at the periodontal clinic.** *Clin Exp Dent Res*. 2021 Feb;7(1):85-92. Epub 2020 Dec 10.

523. Shen L, Zhang T, Yang Y, Lu D, Xu A, Li K. **FPS-ZM1 Alleviates Neuroinflammation in Focal Cerebral Ischemia Rats via Blocking Ligand/RAGE/DIAPH1 Pathway.** *ACS Chem Neurosci.* 2021 Jan 6;12(1):63-78. Epub 2020 Dec 10.
524. M R PR, Nair A, Mohan S, K G R. **Corrigendum to "Chlorogenic acid attenuates glucotoxicity in H9c2 cells via inhibition of glycation and PKC α upregulation and safeguarding innate antioxidant status" [Biomed. Pharmacother. 100 (2018) 467-477].** *Biomed Pharmacother.* 2021 Jan;133:111071. Epub 2020 Dec 6.
525. Xu C, Dong Z, Zhang P, Chang G, Xiang Q, Zhang M, Zhou J, Qiao C, Yang Q, Qin Y, Lou P. **Effect of group cognitive behavioural therapy on psychological stress and blood glucose in people with type 2 diabetes mellitus: A community- based cluster randomized controlled trial in China.** *Diabet Med.* 2021 Feb;38(2):e14491. Epub 2020 Dec 20.
526. Alqerban A. **Levels of proinflammatory chemokines and advanced glycation end products in patients with type-2 diabetes mellitus undergoing fixed orthodontic treatment.** *Angle Orthod.* 2021 Jan 1;91(1):105-110.
527. Danne T, Edelman S, Frias JP, Ampudia-Blasco FJ, Banks P, Jiang W, Davies MJ, Sawhney S. **Efficacy and safety of adding sotagliflozin, a dual sodium- glucose co-transporter (SGLT)1 and SGLT2 inhibitor, to optimized insulin therapy in adults with type 1 diabetes and baseline body mass index ≥ 27 kg/m².** *Diabetes Obes Metab.* 2021 Mar;23(3):854-860. Epub 2020 Dec 23.
528. Yalcin Kehribar D, Cihangiroglu M, Sehmen E, Avcı B, Capraz A, Yildirim Bilgin A, Gunaydin C, Ozgen M. **The receptor for advanced glycation end product (RAGE) pathway in COVID-19.** *Biomarkers.* 2021 Mar;26(2):114-118. Epub 2021 Jan 13.
529. Luo D, Shi Y, Zhu M, Wang H, Yan D, Yu J, Ji J, Liu X, Fan B, Xu Y, Zhang M, He W, Xu J, Yang T. **Subclinical lipohypertrophy--Easily ignored complications of insulin therapy.** *J Diabetes Complications.* 2021 Mar;35(3):107806. Epub 2020 Nov 26.
530. Alibrahim A, AlRamadhan D, Johnny S, Alhashemi M, Alduwaisan H, Al-Hilal M. **The effect of structured diabetes self-management education on type 2 diabetes patients attending a Primary Health Center in Kuwait.** *Diabetes Res Clin Pract.* 2021 Jan;171:108567. Epub 2020 Dec 3.
531. Sathish T, Cao Y. **What is the role of admission HbA1c in managing COVID-19 patients?** *J Diabetes.* 2021 Mar;13(3):273-275. Epub 2020 Dec 22.
532. Błaszczak W, Latocha P, Jeż M, Wiczkowski W. **The impact of high-pressure processing on the polyphenol profile and anti-glycaemic, anti-hypertensive and anti-cholinergic activities of extracts obtained from kiwiberry (*Actinidia arguta*) fruits.** *Food Chem.* 2021 May 1;343:128421. Epub 2020 Oct 19.
533. Leelarathna L, Choudhary P, Wilmot EG, Lumb A, Street T, Kar P, Ng SM. **Hybrid closed-loop therapy: Where are we in 2021?** *Diabetes Obes Metab.* 2021 Mar;23(3):655-660. Epub 2020 Dec 20.
534. Park SD, Kim SW, Moon JS, Lee YY, Cho NH, Lee JH, Jeon JH, Choi YK, Kim MK, Park KG. **Impact of Social Distancing Due to Coronavirus Disease 2019 on the Changes in Glycosylated Hemoglobin Level in People with Type 2 Diabetes Mellitus.** *Diabetes Metab J.* 2021 Jan;45(1):109-114. Epub 2020 Dec 4.
535. Bomholt T, Adrian T, Nørgaard K, Ranjan AG, Almdal T, Larsson A, Vadstrup M, Rix M, Feldt-Rasmussen B, Hornum M. **The Use of HbA1c, Glycated Albumin and Continuous Glucose Monitoring to Assess Glucose Control in the Chronic Kidney Disease Population Including Dialysis.** *Nephron.* 2021;145(1):14-19. Epub 2020 Dec 2.

536. Esackimuthu P, Saraswathi NT. **Non enzymatic covalent modification by glycolysis end product converts hemoglobin into its oxidative stress potency state.** *Biochem Biophys Res Commun.* 2021 Jan 1;534:387-394. Epub 2020 Nov 28.
537. Lee SH, Kim Y, Park SY, Kim C, Kim YJ, Sohn JH. **Pre-Stroke Glycemic Variability Estimated by Glycated Albumin Is Associated with Early Neurological Deterioration and Poor Functional Outcome in Prediabetic Patients with Acute Ischemic Stroke.** *Cerebrovasc Dis.* 2021;50(1):26-33. Epub 2020 Dec 1.
538. Sato H, Imamura Y, Sakamoto S, Sugiura M, Arai T, Yamamoto S, Takeuchi N, Sazuka T, Nakamura K, Nagano H, Koide H, Tanaka T, Komiya A, Ichikawa T. **Adrenalectomy in Japanese patients with subclinical Cushing syndrome: 1-mg dexamethasone suppression test to predict the surgical benefit.** *Int J Urol.* 2021 Mar;28(3):273-279. Epub 2020 Nov 30.
539. Sant S, Wang D, Abidi M, Walker G, Ferrell N. **Mechanical characterization of native and sugar-modified decellularized kidneys.** *J Mech Behav Biomed Mater.* 2021 Feb;114:104220. Epub 2020 Nov 22.
540. Bloudek LM, Gillard KK, Nguyen VB, Klein SZ. **Cost-effectiveness of topical glycopyrronium tosylate for the treatment of primary axillary hyperhidrosis.** *J Med Econ.* 2021 Jan-Dec;24(1):29-37.
541. Kamrath C, Tittel SR, Kapellen TM, von dem Berge T, Heidtmann B, Nagl K, Menzel U, Pöttsch S, Konrad K, Holl RW. **Early versus delayed insulin pump therapy in children with newly diagnosed type 1 diabetes: results from the multicentre, prospective diabetes follow-up DPV registry.** *Lancet Child Adolesc Health.* 2021 Jan;5(1):17-25. Epub 2020 Nov 27.
542. Martinez FJ, Rabe KF, Ferguson GT, Wedzicha JA, Singh D, Wang C, Rossman K, St Rose E, Trivedi R, Ballal S, Darken P, Aurivillius M, Reisner C, Dorinsky P. **Reduced All-Cause Mortality in the ETHOS Trial of Budesonide/Glycopyrrolate/Formoterol for Chronic Obstructive Pulmonary Disease. A Randomized, Double-Blind, Multicenter, Parallel-Group Study.** *Am J Respir Crit Care Med.* 2021 Mar 1;203(5):553-564.
543. Yu T, Jiang S, Yang Y, Fang J, Zou G, Gao H, Zhuo L, Li W. **The Treatment Effectiveness Evaluation for Slowing the Progression of Diabetic Nephropathy During Stage 4 Chronic Kidney Disease.** *Diabetes Ther.* 2021 Jan;12(1):301-312.
544. Bhattacharjee MK, Mehta BS, Akukwe B. **Maillard reaction products inhibit the periodontal pathogen *Aggregatibacter actinomycetemcomitans* by chelating iron.** *Arch Oral Biol.* 2021 Feb;122:104989. Epub 2020 Nov 18.
545. Alghadir AH, Gabr SA, Al-Momani M, Al-Momani F. **Moderate aerobic training modulates cytokines and cortisol profiles in older adults with cognitive abilities.** *Cytokine.* 2021 Feb;138:155373. Epub 2020 Nov 25.
546. Walke PB, Bansode SB, More NP, Chaurasiya AH, Joshi RS, Kulkarni MJ. **Molecular investigation of glycated insulin-induced insulin resistance via insulin signaling and AGE-RAGE axis.** *Biochim Biophys Acta Mol Basis Dis.* 2021 Feb 1;1867(2):166029.
547. Ahn J, Koh J, Kim D, Kim G, Hur KY, Seo SW, Kim K, Kim JH, Yang JH, Jin SM. **Mean and visit-to-visit variability of glycemia and left ventricular diastolic dysfunction: A longitudinal analysis of 3025 adults with serial echocardiography.** *Metabolism.* 2021 Mar;116:154451. Epub 2020 Nov 26.
548. Konkwo C, Perry RJ. **Imeglimin: Current Development and Future Potential in Type 2 Diabetes.** *Drugs.* 2021 Feb;81(2):185-190.

549. Basishvili G, Yang J, Nie L, Docimo S Jr, Pryor AD, Spaniolas K. **HbA1C is not directly associated with complications of bariatric surgery.** *Surg Obes Relat Dis.* 2021 Feb;17(2):271-275. Epub 2020 Oct 14.
550. Liyanagamage DSNK, Jayasinghe S, Attanayake AP, Karunaratne V. **Dual mechanisms of a Sri Lankan traditional polyherbal mixture in the improvement of pancreatic beta cell functions and restoration of lipoprotein alterations in streptozotocin induced diabetic rats.** *J Ethnopharmacol.* 2021 Mar 1;267:113613. Epub 2020 Nov 23.
551. Haymana C, Sonmez A, Demirci I, Fidan Yaylalı G, Nuhoglu I, Sancak S, Yilmaz M, Altuntas Y, Dincceg N, Sabuncu T, Bayram F, Satman I; TEMD Study Group. **Patterns and preferences of antidiabetic drug use in Turkish patients with type 2 diabetes - A nationwide cross-sectional study (TEMED treatment study).** *Diabetes Res Clin Pract.* 2021 Jan;171:108556. Epub 2020 Nov 24.
552. Maria JL, Anand TN, Dona B, Prinu J, Prabhakaran D, Jeemon P. **Task-sharing interventions for improving control of diabetes in low-income and middle-income countries: a systematic review and meta-analysis.** *Lancet Glob Health.* 2021 Feb;9(2):e170-e180. Epub 2020 Nov 23.
553. Fan SL, Lin JA, Chen SY, Lin JH, Lin HT, Chen YY, Yen GC. **Effects of Hsian-tsaio (Mesona procumbens Hemsl.) extracts and its polysaccharides on the promotion of wound healing under diabetes-like conditions.** *Food Funct.* 2021 Jan 7;12(1):119-132.
554. Ishibashi R, Baba Y, Kakinuma K, Takasaki A, Hiraga C, Harama T, Yamamoto T, Nakamura S, Koshizaka M, Maezawa Y, Uchida D, Okajima F. **Assessing Patient Satisfaction Following Sodium Glucose Co-Transporter 2 Inhibitor Treatment for Type 1 Diabetes Mellitus: A Prospective Study in Japan.** *Diabetes Ther.* 2021 Jan;12(1):453-460. Epub 2020 Nov 25.
555. Zhou D, Chen L, Mou X. **Acarbose ameliorates spontaneous type-2 diabetes in db/db mice by inhibiting PDX-1 methylation.** *Mol Med Rep.* 2021 Jan;23(1):1.
556. Thomas MK, Nikooienejad A, Bray R, Cui X, Wilson J, Duffin K, Milicevic Z, Haupt A, Robins DA. **Dual GIP and GLP-1 Receptor Agonist Tirzepatide Improves Beta-cell Function and Insulin Sensitivity in Type 2 Diabetes.** *J Clin Endocrinol Metab.* 2021 Jan 23;106(2):388-396.
557. Xie M, Deng L, Yu Y, Xie X, Zhang M. **The effects of Bushen Yiqi Huoxue prescription and its disassembled prescriptions on a diabetic retinopathy model in Sprague Dawley rats.** *Biomed Pharmacother.* 2021 Jan;133:110920. Epub 2020 Nov 21.
558. Rocha M, Vieira A, Michels M, Borges H, Goulart A, Fernandes F, Domingui D, Ritter C, Dal-Pizzol F. **Effects of S100B neutralization on the long-term cognitive impairment and neuroinflammatory response in an animal model of sepsis.** *Neurochem Int.* 2021 Jan;142:104906. Epub 2020 Nov 21.
559. Hou Y, Lan J, Zhang F, Wu X. **Expression profiles and potential corneal epithelial wound healing regulation targets of high-mobility group box 1 in diabetic mice.** *Exp Eye Res.* 2021 Jan;202:108364. Epub 2020 Nov 20.
560. Li A, Mei Y, Zhao M, Xu J, Seery S, Li R, Zhao J, Zhou Q, Ge X, Xu Q. **The effect of ambient ozone on glucose-homeostasis: A prospective study of non-diabetic older adults in Beijing.** *Sci Total Environ.* 2021 Mar 20;761:143308. Epub 2020 Nov 4.
561. Rodriguez EL, Tao P, Woolfork AG, Li Z, Matsuda R, Sun Z, Hage DS. **Studies of binding by sulfonyleureas with glyoxal- and methylglyoxal-modified albumin by immunoextraction using affinity microcolumns.** *J Chromatogr A.* 2021 Feb 8;1638:461683. Epub 2020 Nov 10.

562. Doherty L, Wan M, Kalajzic I, Sanjay A. **Diabetes impairs periosteal progenitor regenerative potential.** *Bone*. 2021 Feb;143:115764. Epub 2020 Nov 20.
563. Xie J, Bi B, Qin Y, Dong W, Zhong J, Li M, Cheng Y, Xu J, Wang H. **Inhibition of phosphodiesterase-4 suppresses HMGB1/RAGE signaling pathway and NLRP3 inflammasome activation in mice exposed to chronic unpredictable mild stress.** *Brain Behav Immun*. 2021 Feb;92:67-77. Epub 2020 Nov 20.
564. Momeni Z, Bautista M, Neapetung J, Urban R, Yamamoto Y, Krishnan A, Campanucci VA. **RAGE signaling is required for AMPA receptor dysfunction in the hippocampus of hyperglycemic mice.** *Physiol Behav*. 2021 Feb 1;229:113255. Epub 2020 Nov 19.
565. Gastélum-Cano JM, Islas-Osuna MA, Arizaga-Berber JA. **Higher values of fasting blood glucose and glycated hemoglobin are not associated with mortality in Covid-19 Mexican patients.** *Prim Care Diabetes*. 2021 Feb;15(1):1-3. Epub 2020 Nov 5.
566. Creecy A, Brown KL, Rose KL, Voziyan P, Nyman JS. **Post-translational modifications in collagen type I of bone in a mouse model of aging.** *Bone*. 2021 Feb;143:115763.
567. Bhatt DL, Szarek M, Pitt B, Cannon CP, Leiter LA, McGuire DK, Lewis JB, Riddle MC, Inzucchi SE, Kosiborod MN, Cherney DZI, Dwyer JP, Scirica BM, Bailey CJ, Díaz R, Ray KK, Udell JA, Lopes RD, Lapuerta P, Steg PG; SCORED Investigators. **Sotagliflozin in Patients with Diabetes and Chronic Kidney Disease.** *N Engl J Med*. 2021 Jan 14;384(2):129-139. Epub 2020 Nov 16.
568. Song S, Liu Q, Chai WM, Xia SS, Yu ZY, Wei QM. **Inhibitory potential of 4-hexylresorcinol against α -glucosidase and non-enzymatic glycation: Activity and mechanism.** *J Biosci Bioeng*. 2021 Mar;131(3):241-249. Epub 2020 Nov 13.
569. Manivannan S, Marei O, Elalfy O, Zaben M. **Neurogenesis after traumatic brain injury - The complex role of HMGB1 and neuroinflammation.** *Neuropharmacology*. 2021 Feb 1;183:108400. Epub 2020 Nov 13.
570. Toki T, Shimizu-Motohashi Y, Komaki H, Takeshita E, Ishiyama A, Saito T, Mori-Yoshimura M, Sumitomo N, Hirasawa-Inoue A, Nakagawa E, Nishino I, Goto YI, Sasaki M. **Hyperglycemic Crisis in Patients With Mitochondrial Encephalopathy, Lactic Acidosis, and Stroke-like Episodes (MELAS).** *Pediatr Neurol*. 2021 Jan;114:1-4.
571. Seifert I, Friess W. **The effect of residual moisture on a monoclonal antibody stability in L-arginine based lyophilisates.** *Eur J Pharm Biopharm*. 2021 Jan;158:53-61.
572. Dong L, Zhang Z, Liu X, Wang Q, Hong Y, Li X, Liu J. **RNA sequencing reveals BMP4 as a basis for the dual-target treatment of diabetic retinopathy.** *J Mol Med (Berl)*. 2021 Feb;99(2):225-240. Epub 2020 Nov 14.
573. Romero-Díaz C, Duarte-Montero D, Gutiérrez-Romero SA, Mendivil CO. **Diabetes and Bone Fragility.** *Diabetes Ther*. 2021 Jan;12(1):71-86. Epub 2020 Nov 13.
574. Espeland MA, Pratley RE, Rosenstock J, Kadowaki T, Seino Y, Zinman B, Marx N, McGuire DK, Andersen KR, Mattheus M, Keller A, Weber M, Johansen OE. **Cardiovascular outcomes and safety with linagliptin, a dipeptidyl peptidase-4 inhibitor, compared with the sulphonylurea glimepiride in older people with type 2 diabetes: A subgroup analysis of the randomized CAROLINA trial.** *Diabetes Obes Metab*. 2021 Feb;23(2):569-580. Epub 2020 Dec 6.
575. Hasan I, Chowdhury ABMA, Haque MI, Patterson CC. **Changes in glycated hemoglobin, diabetes knowledge, quality of life, and anxiety in children and adolescents with type 1 diabetes attending summer camps: A systematic review and meta-analysis.** *Pediatr Diabetes*. 2021 Mar;22(2):124-131. Epub 2020 Dec 2.

576. Blonde L, Patel C, Wu B, Chen YW, Pericone CD, Bookhart B. **Real-World Comparative Effectiveness of Canagliflozin Versus Empagliflozin and Dapagliflozin in Patients with Type 2 Diabetes in the United States.** *Adv Ther.* 2021 Jan;38(1):594-606. Epub 2020 Nov 12.
577. Marvibaigi M, Hosseini SM, Amini N. **Launaea acanthodes (Boiss) O. Kuntze mediates hepatic glucose metabolism and ameliorates impaired pancreatic function in streptozotocin-induced diabetic rats.** *J Ethnopharmacol.* 2021 Mar 25;268:113577.
578. Patil R, Arvindekar A. **Glycation of gut proteins initiates microbial dysbiosis and can promote establishment of diabetes in experimental animals.** *Microb Pathog.* 2021 Mar;152:104589. Epub 2020 Nov 7.
579. Araki K, Kinoshita R, Tomonobu N, Gohara Y, Tomida S, Takahashi Y, Senoo S, Taniguchi A, Itano J, Yamamoto KI, Murata H, Suzawa K, Shien K, Yamamoto H, Okazaki M, Sugimoto S, Ichimura K, Nishibori M, Miyahara N, Toyooka S, Sakaguchi M. **The heterodimer S100A8/A9 is a potent therapeutic target for idiopathic pulmonary fibrosis.** *J Mol Med (Berl).* 2021 Jan;99(1):131-145. Epub 2020 Nov 9.
580. Tomaszewski EL, Orchard TJ, Hawkins M, Conway BN, Buchanich JM, Maynard J, Songer T, Costacou T. **Skin intrinsic fluorescence scores are a predictor of all-cause mortality risk in type 1 diabetes: The Epidemiology of Diabetes Complications study.** *J Diabetes Complications.* 2021 Feb;35(2):107770. Epub 2020 Oct 23.
581. Sun D, Wu Y, Chang SJ, Chen CJ, Liu JT. **Investigation of the recognition interaction between glycated hemoglobin and its aptamer by using surface plasmon resonance.** *Talanta.* 2021 Jan 15;222:121466. Epub 2020 Aug 2.
582. O'Malley G, Ebekozién O, Desimone M, Pinnaro CT, Roberts A, Polsky S, Noor N, Aleppo G, Basina M, Tansey M, Steenkamp D, Vendrame F, Lorincz I, Mathias P, Agarwal S, Golden L, Hirsch IB, Levy CJ. **COVID-19 Hospitalization in Adults with Type 1 Diabetes: Results from the T1D Exchange Multicenter Surveillance Study.** *J Clin Endocrinol Metab.* 2021 Jan 23;106(2):e936-e942.
583. Kudoh R, Shibayama T, Hidaka K. **The role of knowledge and self-efficacy on dental consultation behavior of patients with type 2 diabetes.** *Jpn J Nurs Sci.* 2021 Jan;18(1):e12378. Epub 2020 Nov 9.
584. Shao B, Hou S, Chan Y, Shao C, Lao L. **Remission of new-onset type 2 diabetes mellitus in an adolescent using an integrative medicine approach: A case report.** *J Integr Med.* 2021 Jan;19(1):85-88. Epub 2020 Oct 22.
585. El-Hadary A, Sitohy M. **Safely effective hypoglycemic action of stevia and turmeric extracts on diabetic Albino rats.** *J Food Biochem.* 2021 Jan;45(1):e13549.
586. Ma J, Zhang B, Hou J, Peng Y. **Efficacy and Safety of Once Weekly Dulaglutide in East Asian Patients with Type 2 Diabetes: Subgroup Analysis by Potential Influential Factors.** *Diabetes Ther.* 2021 Jan;12(1):211-222. Epub 2020 Nov 8.
587. Recabarren-Leiva D, Burgos CF, Hernández B, García-García FJ, Castro RI, Guzman L, Fuentes E, Palomo I, Alarcón M. **Effects of the age/rage axis in the platelet activation.** *Int J Biol Macromol.* 2021 Jan 1;166:1149-1161. Epub 2020 Nov 5.
588. Yu MX, Lei B, Song X, Huang YM, Ma XQ, Hao CX, Yang WH, Pan ML. **Compound XiongShao Capsule ameliorates streptozotocin-induced diabetic peripheral neuropathy in rats via inhibiting apoptosis, oxidative - nitrosative stress and advanced glycation end products.** *J Ethnopharmacol.* 2021 Mar 25;268:113560.
589. van de Laar AWJM, Gerdes VEA, Huijgen R, Acherman YIZ, Meesters EW, Nieuwdorp M. **Interpretation of laboratory results after gastric bypass surgery: the effects of**

- weight loss and time on 30 blood tests in a 5-year follow-up program. *Surg Obes Relat Dis.* 2021 Feb;17(2):319-328. Epub 2020 Sep 30.
590. Maasen K, Scheijen JLJM, Opperhuizen A, Stehouwer CDA, Van Greevenbroek MM, Schalkwijk CG. **Quantification of dicarbonyl compounds in commonly consumed foods and drinks; presentation of a food composition database for dicarbonyls.** *Food Chem.* 2021 Mar 1;339:128063. Epub 2020 Sep 15.
591. Deng Y, Guo SL, Li JQ, Xie SS, Zhou YC, Wei B, Wang Q, Wang F. **Interferon regulatory factor 7 inhibits rat vascular smooth muscle cell proliferation and inflammation in monocrotaline-induced pulmonary hypertension.** *Life Sci.* 2021 Jan 1;264:118709. Epub 2020 Nov 2.
592. Wehler E, Lautsch D, Kowal S, Davies G, Briggs A, Li Q, Rajpathak S, Alsumali A. **Budget Impact of Oral Semaglutide Intensification versus Sitagliptin among US Patients with Type 2 Diabetes Mellitus Uncontrolled with Metformin.** *Pharmacoeconomics.* 2021 Mar;39(3):317-330. Epub 2020 Nov 5.
593. Li Q, Wen F, Wang Y, Li S, Lin S, Qi C, Chen Z, Qiu X, Zhang Y, Zhang S, Tao Y, Feng Z, Li Z, Li R, Ye Z, Liang X, Liu S, Xie J, Wang W. **Diabetic Kidney Disease Benefits from Intensive Low-Protein Diet: Updated Systematic Review and Meta-analysis.** *Diabetes Ther.* 2021 Jan;12(1):21-36. Epub 2020 Nov 4.
594. Shang W, Zhang Y, Wang G, Han D. **Benefits of continuous positive airway pressure on glycaemic control and insulin resistance in patients with type 2 diabetes and obstructive sleep apnoea: A meta-analysis.** *Diabetes Obes Metab.* 2021 Feb;23(2):540-548. Epub 2020 Dec 2.
595. Soong TC, Lee MH, Lee WJ, Chen JC, Wu CC, Chun SC. **One Anastomosis Gastric Bypass for the Treatment of Type 2 Diabetes: Long-Term Results and Recurrence.** *Obes Surg.* 2021 Mar;31(3):935-941. Epub 2020 Nov 3.
596. Hanssen NMJ, Teraa M, Scheijen JLJM, Van de Waarenburg M, Gremmels H, Stehouwer CDA, Verhaar MC, Schalkwijk CG. **Plasma Methylglyoxal Levels Are Associated With Amputations and Mortality in Severe Limb Ischemia Patients With and Without Diabetes.** *Diabetes Care.* 2021 Jan;44(1):157-163. Epub 2020 Nov 3.
597. Niu X, Divino V, Sharma S, Dekoven M, Anupindi VR, Dembek C. **Healthcare resource utilization and exacerbations in patients with chronic obstructive pulmonary disease treated with nebulized glycopyrrolate in the USA: a real-world data analysis.** *J Med Econ.* 2021 Jan-Dec;24(1):1-9.
598. Chan VWY, Kong APS, Lau JTF, Mak WWS, Cameron LD, Mo PKH. **An Intervention to Change Illness Representations and Self-Care of Individuals With Type 2 Diabetes: A Randomized Controlled Trial.** *Psychosom Med.* 2021 Jan 1;83(1):71-84.
599. Charlier S, Vavanikunnel J, Becker C, Jick SS, Meier C, Meier CR. **Antidiabetic Treatment, Level of Glycemic Control, and Risk of Fracture in Type 2 Diabetes: a Nested, Case-Control Study.** *J Clin Endocrinol Metab.* 2021 Jan 23;106(2):554-566.
600. González-Viveros N, Castro-Ramos J, Gómez-Gil P, Cerecedo-Núñez HH. **Characterization of glycated hemoglobin based on Raman spectroscopy and artificial neural networks.** *Spectrochim Acta A Mol Biomol Spectrosc.* 2021 Feb 15;247:119077.
601. Sampson M, Clark A, Bachmann M, Garner N, Irvine L, Howe A, Greaves C, Auckland S, Smith J, Turner J, Rea D, Rayman G, Dhatariya K, John WG, Barton G, Usher R, Ferns C, Pascale M; Norfolk Diabetes Prevention Study (NDPS) Group. **Lifestyle Intervention With or Without Lay Volunteers to Prevent Type 2 Diabetes in People With Impaired**

- Fasting Glucose and/or Nondiabetic Hyperglycemia: A Randomized Clinical Trial.** *JAMA Intern Med.* 2021 Feb 1;181(2):168-178.
602. Zhu D, Fang F, Zhang X, Han R, Liu F, Wang H. **Childbearing age is correlated with components of metabolic syndrome and parameters of insulin resistance in Chinese menopausal women.** *Gynecol Endocrinol.* 2021 Mar;37(3):201-205. d Epub 2020 Nov 2.
603. Lou G, Larramona G, Montaner T, Barbed S. **Effect of CGM in the HbA1c and Coefficient of Variation of glucose in a pediatric sample.** *Prim Care Diabetes.* 2021 Apr;15(2):289-292. Epub 2020 Oct 31.
604. Liu X, Chen X, Lin T, Yin B, Li Q, Wang L, Shao J, Yang J. **The level variation of N^ε-(carboxymethyl)lysine is correlated with chlorogenic acids in Arabica L. Coffee beans under different process conditions.** *Food Chem.* 2021 May 1;343:128458. Epub 2020 Oct 24.
605. Tumminia A, Graziano M, Vinciguerra F, Lomonaco A, Frittita L. **Efficacy, renal safety and tolerability of sodium-glucose cotransporter 2 inhibitors (SGLT2i) in elderly patients with type 2 diabetes: A real-world experience.** *Prim Care Diabetes.* 2021 Apr;15(2):283-288. Epub 2020 Oct 28.
606. Li K, Chen G, Luo H, Li J, Liu A, Yang C, Wang J, Xu J, Gao S, Chen P, Jiang Y. **MRP8/14 mediates macrophage efferocytosis through RAGE and Gas6/MFG-E8, and induces polarization via TLR4-dependent pathway.** *J Cell Physiol.* 2021 Feb;236(2):1375-1390. Epub 2020 Jul 20.
607. Bolla AM, Gandolfi A, Borgonovo E, Laurenzi A, Caretto A, Molinari C, Catalano RS, Bianconi E, Monti P, Sordi V, Pellegrini S, Lampasona V, Costa S, Scavini M, Bosi E, Piemonti L. **Rapamycin Plus Vildagliptin to Recover β -Cell Function in Long-Standing Type 1 Diabetes: A Double-Blind, Randomized Trial.** *J Clin Endocrinol Metab.* 2021 Jan 23;106(2):e507-e519.
608. Gogas Yavuz D, Apaydin T, Imre E, Uygur MM, Yazici D. **Skin Autofluorescence and Carotid Intima-Media Thickness Evaluation Following Bariatric Surgery in Patients with Severe Obesity.** *Obes Surg.* 2021 Mar;31(3):1055-1061. Epub 2020 Oct 29.
609. Liu D, Cao X, Kong Y, Mu T, Liu J. **Inhibitory mechanism of sinensetin on α -glucosidase and non-enzymatic glycation: Insights from spectroscopy and molecular docking analyses.** *Int J Biol Macromol.* 2021 Jan 1;166:259-267. Epub 2020 Oct 26.
610. He X, Li Z, Zhang Q. **A UPLC-MRM-MS method for comprehensive profiling of Amadori compound-modified phosphatidylethanolamines in human plasma.** *Anal Bioanal Chem.* 2021 Jan;413(2):431-443. Epub 2020 Oct 27.
611. Tezuka Y, Sekine O, Hirano A, Hanada Y, Nakanishi I, Ariga M, Azuma C, Yamamoto Y, Ito-Kobayashi J, Washiyama M, Iwanishi M, Furuta M, Kanamori M, Shimatsu A, Kashiwagi A. **A Prospective, Open-Label Short-Term Pilot Study on Modification of the Skin Hydration Status During Treatment With a Sodium-Glucose Cotransporter-2 Inhibitor.** *Diabetes Ther.* 2021 Jan;12(1):431-440. Epub 2020 Oct 27.
612. Piras de Oliveira C, Mitchell BD, Fan L, Garey C, Liao B, Bispham J, Vint N, Perez-Nieves M, Hughes A, McAuliffe-Fogarty A. **Patient perspectives on the use of half-unit insulin pens by people with type 1 diabetes: a cross-sectional observational study.** *Curr Med Res Opin.* 2021 Jan;37(1):45-51. Epub 2020 Nov 16.
613. Zhang M, Tu ZC, Liu J, Hu YM, Wang H, Mao JH, Li JL. **The IgE/IgG binding capacity and structural changes of Alaska Pollock parvalbumin glycosylated with different reducing sugars.** *J Food Biochem.* 2021 Jan;45(1):e13539. Epub 2020 Oct 26.

614. Bomholt T, Idorn T, Knop FK, Jørgensen MB, Ranjan AG, Resuli M, Hansen PM, Borg R, Persson F, Feldt-Rasmussen B, Hornum M. **The Glycemic Effect of Liraglutide Evaluated by Continuous Glucose Monitoring in Persons with Type 2 Diabetes Receiving Dialysis.** *Nephron*. 2021;145(1):27-34. Epub 2020 Oct 26.
615. Zenari L, Da Porto A, De Moliner L, Lugli F, Guazzoni V, GropPELLI G, Molteni L, Bracaccia M, Frison V, Simioni N, Bonsembiante B, Miranda C, Lapolla A. **Real-World Evaluation of Glycemic Outcomes and Extra-Glycemic Parameters in Diabetic Patients Treated with the Combined Formulation Degludec-Liraglutide (Ideglira).** *Diabetes Ther*. 2021 Jan;12(1):197-209. Epub 2020 Oct 26.
616. Koshizaka M, Ishikawa K, Ishibashi R, Takahashi S, Sakamoto K, Yokoh H, Baba Y, Ide S, Ide K, Ishikawa T, Onishi S, Kobayashi K, Takemoto M, Horikoshi T, Shimofusa R, Maezawa Y, Yokote K. **Comparison of Visceral Fat Reduction by Ipragliflozin and Metformin in Elderly Type 2 Diabetes Patients: Sub-Analysis of a Randomized-Controlled Study.** *Diabetes Ther*. 2021 Jan;12(1):183-196. Epub 2020 Oct 24.
617. Ku EJ, Lee DH, Jeon HJ, Park F, Oh TK. **Psychometric Analysis Regarding the Barriers to Providing Effective Insulin Treatment in Type 2 Diabetic Patients.** *Diabetes Ther*. 2021 Jan;12(1):159-170. Epub 2020 Oct 24.
618. Shetty VB, Fournier PA, Paramalingam N, Soon W, Roby HC, Jones TW, Davis EA. **Effect of Exercise Intensity on Exogenous Glucose Requirements to Maintain Stable Glycemia At High Insulin Levels in Type 1 Diabetes.** *J Clin Endocrinol Metab*. 2021 Jan 1;106(1):e83-e93.
619. Lissner LJ, Rodrigues L, Wartchow KM, Borba E, Bobermin LD, Fontella FU, Hansen F, Quincozes-Santos A, Souza DOG, Gonçalves CA. **Short-Term Alterations in Behavior and Astroglial Function After Intracerebroventricular Infusion of Methylglyoxal in Rats.** *Neurochem Res*. 2021 Feb;46(2):183-196. Epub 2020 Oct 23.
620. Taimour S, Gottsäter A, Jujic A, Nilsson PM. **Hyperglycemia and arterial stiffness across two generations.** *J Hypertens*. 2021 Mar 1;39(3):471-475.
621. Miyakuni T, Komiyama H, Takano M, Ikeda T, Matsushita M, Kobayashi N, Otsuka T, Miyauchi Y, Asai K, Seino Y, Shimizu W. **A preliminary pilot study investigating the impact of endovascular treatment on leg muscle volume in peripheral artery disease and its relation to baseline glycemic control.** *Nutr Metab Cardiovasc Dis*. 2021 Jan 4;31(1):269-276. Epub 2020 Sep 9.
622. Park JJ, Lee WY. **Adsorption and desorption characteristics of a phenolic compound from *Ecklonia cava* on macroporous resin.** *Food Chem*. 2021 Feb 15;338:128150.
623. Li Y, Hou JG, Liu Z, Gong XJ, Hu JN, Wang YP, Liu WC, Lin XH, Wang Z, Li W. **Alleviative effects of 20(R)-Rg3 on HFD/STZ-induced diabetic nephropathy via MAPK/NF- κ B signaling pathways in C57BL/6 mice.** *J Ethnopharmacol*. 2021 Mar 1;267:113500. Epub 2020 Oct 19.
624. Panagi L, Hackett RA, Steptoe A, Poole L. **Enjoyment of life predicts reduced type 2 diabetes incidence over 12 years of follow-up: findings from the English Longitudinal Study of Ageing.** *J Epidemiol Community Health*. 2021 Mar;75(3):297-304.
625. Aglago EK, Rinaldi S, Freisling H, Jiao L, Hughes DJ, Fedirko V, Schalkwijk CG, Weiderpass E, Dahm CC, Overvad K, Eriksen AK, Kyrø C, Boutron-Ruault MC, Rothwell JA, Severi G, Katzke V, Kühn T, Schulze MB, Aleksandrova K, Masala G, Krogh V, Panico S, Tumino R, Naccarati A, Bueno-de-Mesquita B, van Gils CH, Sandanger TM, Gram IT, Skeie G, Quirós JR, Jakszyn P, Sánchez MJ, Amiano P, Huerta JM, Ardanaz E, Johansson I, Harlid S, Perez-Cornago A, Mayén AL, Cordova R, Gunter MJ, Vineis P,

- Cross AJ, Riboli E, Jenab M. **Soluble Receptor for Advanced Glycation End-products (sRAGE) and Colorectal Cancer Risk: A Case- Control Study Nested within a European Prospective Cohort.** *Cancer Epidemiol Biomarkers Prev.* 2021 Jan;30(1):182-192. Epub 2020 Oct 20.
626. Tay JHT, Jiang Y, Hong J, He H, Wang W. **Effectiveness of lay-led, group- based self-management interventions to improve glycated hemoglobin (HbA1c), self-efficacy, and emergency visit rates among adults with type 2 diabetes: A systematic review and meta-analysis.** *Int J Nurs Stud.* 2021 Jan;113:103779. Epub 2020 Sep 24.
627. Kim W, Go T, Kang DR, Lee EJ, Huh JH. **Hemoglobin glycation index is associated with incident chronic kidney disease in subjects with impaired glucose metabolism: A 10-year longitudinal cohort study.** *J Diabetes Complications.* 2021 Jan;35(1):107760.
628. Huang G, Su J, Zhao W, Deng Z, Wang P, Dong H, Zhao H, Cai S. **JNK modulates RAGE/ β -catenin signaling and is essential for allergic airway inflammation in asthma.** *Toxicol Lett.* 2021 Jan 1;336:57-67. Epub 2020 Oct 16.
629. Dobi A, Rosanaly S, Devin A, Baret P, Meilhac O, Harry GJ, d'Hellencourt CL, Rondeau P. **Advanced glycation end-products disrupt brain microvascular endothelial cell barrier: The role of mitochondria and oxidative stress.** *Microvasc Res.* 2021 Jan;133:104098. Epub 2020 Oct 17.
630. Yang W, Xu X, Lei T, Ma J, Li L, Shen J, Ye B, Zhu S, Meinicke T. **Efficacy and safety of linagliptin as add-on therapy to insulin in Chinese patients with type 2 diabetes mellitus: A randomized, double-blind, placebo-controlled trial.** *Diabetes Obes Metab.* 2021 Feb;23(2):642-647. Epub 2020 Nov 6.
631. Nishibe T, Dardik A, Nishibe M, Kano M, Matsumoto R, Nakano Y, Maekawa K, Irikata Y, Ogino H, Ono S, Koizumi J. **Relationship Between Serum Eicosapentaenoic Acid to Arachidonic Acid Ratio and Atherosclerotic Risk Factors in Patients With Peripheral Artery Disease.** *Vasc Endovascular Surg.* 2021 Feb;55(2):112-116. Epub 2020 Oct 19.
632. Wilmot EG, Lumb A, Hammond P, Murphy HR, Scott E, Gibb FW, Platts J, Choudhary P. **Time in range: A best practice guide for UK diabetes healthcare professionals in the context of the COVID-19 global pandemic.** *Diabet Med.* 2021 Jan;38(1):e14433. Epub 2020 Nov 16.
633. Ludvigsson J. **Effect of COVID-19 pandemic on treatment of Type 1 diabetes in children.** *Acta Paediatr.* 2021 Mar;110(3):933-934. Epub 2020 Oct 29.
634. Loy SL, Ku CW, Lai AEQ, Choo XH, Ho AHM, Cheung YB, Godfrey KM, Chong YS, Gluckman PD, Shek LP, Tan KH, Yap FKP, Chan SY, Chan JKY. **Plasma glycemic measures and fecundability in a Singapore preconception cohort study.** *Fertil Steril.* 2021 Jan;115(1):138-147. Epub 2020 Oct 15.
635. Hu YM, Guo HZ, Wang H, Yang YF, Tu ZC, Huang T. **Insight into the mechanism of urea inhibit ovalbumin-glucose glycation by conventional spectrometry and liquid chromatography-high resolution mass spectrometry.** *Food Chem.* 2021 Apr 16;342:128340. Epub 2020 Oct 9.
636. Anand A, Komati A, Katragunta K, Shaik H, Nagendla NK, Kuncha M, Mudiam MKR, Babu KS, Tiwari AK. **Phytometabolomic analysis of boiled rhizome of *Nymphaea nouchali* (Burm. f.) using UPLC-Q-TOF-MS^E, LC-QqQ-MS & GC-MS and evaluation of antihyperglycemic and antioxidant activities.** *Food Chem.* 2021 Apr 16;342:128313. Epub 2020 Oct 7.

637. Liu D, He Y, Xiao J, Zhou Q, Wang M. **The occurrence and stability of Maillard reaction products in various traditional Chinese sauces.** *Food Chem.* 2021 Apr 16;342:128319. Epub 2020 Oct 8.
638. Sawas T, Dilmaghani S, Dhaliwal L, Wang KK, Iyer PG, Katzka DA. **Risk Factor Profiles Can Distinguish Esophageal Adenocarcinoma From Barrett's Esophagus.** *Am J Gastroenterol.* 2021 Jan 1;116(1):198-201.
639. Yu X, Ma X, Lin W, Xu Q, Zhou H, Kuang H. **Long noncoding RNA MIAT regulates primary human retinal pericyte pyroptosis by modulating miR-342-3p targeting of CASP1 in diabetic retinopathy.** *Exp Eye Res.* 2021 Jan;202:108300. Epub 2020 Oct 13.
640. Ghaffari S, Jang E, Naderinabi F, Sanwal R, Khosraviani N, Wang C, Steinberg BE, Goldenberg NM, Ikeda J, Lee WL. **Endothelial HMGB1 Is a Critical Regulator of LDL Transcytosis via an SREBP2-SR-BI Axis.** *Arterioscler Thromb Vasc Biol.* 2021 Jan;41(1):200-216. Epub 2020 Oct 15.
641. Yin Q, Ma J, Han X, Zhang H, Wang F, Zhuang P, Zhang Y. **Spatiotemporal variations of vascular endothelial growth factor in the brain of diabetic cognitive impairment.** *Pharmacol Res.* 2021 Jan;163:105234. Epub 2020 Oct 11.
642. Osathanugrah P, Sanjiv N, Siegel NH, Ness S, Chen X, Subramanian ML. **The Impact of Race on Short-term Treatment Response to Bevacizumab in Diabetic Macular Edema.** *Am J Ophthalmol.* 2021 Feb;222:310-317. Epub 2020 Oct 10.
643. Prasanna G, Jing P. **Polyphenol binding disassembles glycation-modified bovine serum albumin amyloid fibrils.** *Spectrochim Acta A Mol Biomol Spectrosc.* 2021 Feb 5;246:119001. Epub 2020 Sep 25.
644. Sun J, Mu Y, Liu T, Jing H, Obadi M, Yang Y, Dong S, Xu B. **Evaluation of glycation reaction of ovalbumin with dextran: Glycation sites identification by capillary liquid chromatography coupled with tandem mass spectrometry.** *Food Chem.* 2021 Mar 30;341(Pt 1):128066. Epub 2020 Sep 22.
645. Broome DT, Pantalone KM, Kashyap SR, Philipson LH. **Approach to the Patient with MODY-Monogenic Diabetes.** *J Clin Endocrinol Metab.* 2021 Jan 1;106(1):237-250.
646. Chen Y, Cai L, Guo X, Li Z, Liao X, Zhang X, Huang L, He J. **HMGB1-activated fibroblasts promote breast cancer cells metastasis via RAGE/aerobic glycolysis.** *Neoplasma.* 2021 Jan;68(1):71-78. Epub 2020 Oct 7.
647. Gerstein HC, Branch K, Heenan L, Del Prato S, Khurmi NS, Lam CSP, Pratley R, Rosenstock J, Sattar N. **Design and baseline characteristics of the AMPLITUDE-O cardiovascular outcomes trial of efpeglenatide, a weekly glucagon-like peptide-1 receptor agonist.** *Diabetes Obes Metab.* 2021 Feb;23(2):318-323. Epub 2020 Oct 22.
648. Waghela BN, Vaidya FU, Ranjan K, Chhipa AS, Tiwari BS, Pathak C. **AGE-RAGE synergy influences programmed cell death signaling to promote cancer.** *Mol Cell Biochem.* 2021 Feb;476(2):585-598. Epub 2020 Oct 6.
649. Wolff LS, Flynn A, Xuan Z, Errichetti KS, Tapia Walker S, Brodesky MK. **The Effect of Integrating Primary Care and Mental Health Services on Diabetes and Depression: A Multi-site Impact Evaluation on the US-Mexico Border.** *Med Care.* 2021 Jan;59(1):67-76.
650. Rana T, Behl T, Mehta V, Uddin MS, Bungau S. **Molecular insights into the therapeutic promise of targeting HMGB1 in depression.** *Pharmacol Rep.* 2021 Feb;73(1):31-42.
651. Dawson KG, Jin A, Summerskill M, Swann D. **Mobile Diabetes Telemedicine Clinics for Aboriginal First Nation People With Reported Diabetes in British Columbia.** *Can J Diabetes.* 2021 Feb;45(1):89-95. Epub 2020 Jun 7.

652. Kyi M, Gorelik A, Reid J, Rowan LM, Wraight PR, Colman PG, Fourlanos S. **Clinical Prediction Tool To Identify Adults With Type 2 Diabetes at Risk for Persistent Adverse Glycemia in Hospital.** *Can J Diabetes.* 2021 Mar;45(2):114-121.e3. Epub 2020 Jun 10.
653. Zhao D, Sheng B, Li H, Wu Y, Xu D, Li C. **Glycation from α -dicarbonyl compounds has different effects on the heat-induced aggregation of bovine serum albumin and β -casein.** *Food Chem.* 2021 Mar 15;340:128108. Epub 2020 Sep 17.
654. Ciancio A, Ribaldone DG, Dotta A, Giordanino C, Sacco M, Fagoonee S, Pellicano R, Saracco GM. **Long-term follow-up of diabetic and non-diabetic patients with chronic hepatitis C successfully treated with direct-acting antiviral agents.** *Liver Int.* 2021 Feb;41(2):276-287. Epub 2020 Nov 23.
655. Ploubidis GB, Batty GD, Patalay P, Bann D, Goodman A. **Association of Early-Life Mental Health With Biomarkers in Midlife and Premature Mortality: Evidence From the 1958 British Birth Cohort.** *JAMA Psychiatry.* 2021 Jan 1;78(1):38-46.
656. Hameed S, Salem V, Alessimii H, Scholtz S, Dar O, Miras AD, Meeran K, Bloom SR, Ahmed AR, Purkayastha S, Chahal H, Tan T. **Imperial Satiety Protocol: A new non-surgical weight-loss programme, delivered in a health care setting, produces improved clinical outcomes for people with obesity.** *Diabetes Obes Metab.* 2021 Jan;23(1):270-275. Epub 2020 Oct 15.
657. Rooney MR, Tang O, Pankow JS, Selvin E. **Glycaemic markers and all-cause mortality in older adults with and without diabetes: the Atherosclerosis Risk in Communities (ARIC) study.** *Diabetologia.* 2021 Feb;64(2):339-348. Epub 2020 Sep 29.
658. Dupont V, Al-Rifai R, Poitevin G, Ortillon J, Jayyosi L, Terryn C, Francois C, Rieu P, Fritz G, Boulagnon-Rombi C, Fichel C, Schmidt AM, Tournois C, Nguyen P, Touré F. **AgeR deletion decreases soluble fms-like tyrosine kinase 1 production and improves post-ischemic angiogenesis in uremic mice.** *Angiogenesis.* 2021 Feb;24(1):47-55.
659. Nguyen CQT, Denis MH, Chagnon M, Rabasa-Lhoret R, Mailhot G. **Abnormal glucose tolerance in a pediatric cystic fibrosis cohort: Trends in clinical outcomes and associated factors in the preceding years.** *Nutr Metab Cardiovasc Dis.* 2021 Jan 4;31(1):277-285. Epub 2020 Aug 8.
660. Graf von Armansepp B, Koller F, Gericke N, Hellwig M, Jagtap PKA, Heermann R, Hennig J, Henle T, Lassak J. **Transcriptional regulation of the N^ε-fructoselysine metabolism in Escherichia coli by global and substrate-specific cues.** *Mol Microbiol.* 2021 Feb;115(2):175-190. Epub 2020 Oct 14.
661. Yoshizawa K, Takeuchi K, Nakamura T, Ukai S, Takahashi Y, Sato A, Takasawa R, Tanuma SI. **Antinociceptive activity of the novel RAGE inhibitor, papaverine, in a mouse model of chronic inflammatory pain.** *Synapse.* 2021 Mar;75(3):e22188.
662. Niwa H, Kurimoto SI, Kubota T, Sekiguchi M. **Macrocarquinoids A-C, new meroterpenoids from Sargassum macrocarpum.** *J Nat Med.* 2021 Jan;75(1):194-200. Epub 2020 Sep 24.
663. Lee TW, Lee TI, Lin YK, Chen YC, Kao YH, Chen YJ. **Effect of antidiabetic drugs on the risk of atrial fibrillation: mechanistic insights from clinical evidence and translational studies.** *Cell Mol Life Sci.* 2021 Feb;78(3):923-934. Epub 2020 Sep 23.
664. Kara O, Can ME. **Evaluation of microvascular changes in retinal zones and optic disc in pediatric patients with type 1 diabetes mellitus.** *Graefes Arch Clin Exp Ophthalmol.* 2021 Feb;259(2):323-334. Epub 2020 Sep 22.

665. Ambrož M, de Vries ST, Hoogenberg K, Denig P. **Trends in HbA_{1c} thresholds for initiation of hypoglycemic agents: Impact of changed recommendations for older and frail patients.** *Pharmacoepidemiol Drug Saf.* 2021 Jan;30(1):37-44.
666. Minami T, Matsumoto T, Tabara Y, Gozal D, Smith D, Murase K, Tanizawa K, Takahashi N, Nakatsuka Y, Hamada S, Handa T, Takeyama H, Oga T, Nakamoto I, Wakamura T, Komenami N, Setoh K, Tsutsumi T, Kawaguchi T, Kamatani Y, Takahashi Y, Morita S, Nakayama T, Hirai T, Matsuda F, Chin K; Nagahama Study Group. **Impact of sleep-disordered breathing on glucose metabolism among individuals with a family history of diabetes: the Nagahama study.** *J Clin Sleep Med.* 2021 Feb 1;17(2):129-140.
667. Francisco FA, Saavedra LPJ, Junior MDF, Barra C, Matafome P, Mathias PCF, Gomes RM. **Early AGEing and metabolic diseases: is perinatal exposure to glycotoxins programming for adult-life metabolic syndrome?** *Nutr Rev.* 2021 Jan 1;79(1):13-24.
668. Osimo EF, Perry BI, Cardinal RN, Lynall ME, Lewis J, Kudchadkar A, Murray GK, Perez J, Jones PB, Khandaker GM. **Inflammatory and cardiometabolic markers at presentation with first episode psychosis and long-term clinical outcomes: A longitudinal study using electronic health records.** *Brain Behav Immun.* 2021 Jan;91:117-127.
669. Giraudi PJ, Giuricin M, Bonazza D, de Manzini N, Tiribelli C, Palmisano S, Rosso N. **Modifications of IGF2 and EGFR plasma protein concentrations in NAFLD patients after bariatric surgery.** *Int J Obes (Lond).* 2021 Feb;45(2):374-382. Epub 2020 Sep 17.
670. Li J, Wang Y, Zheng X, Sheng J, Guo H, Long W, Xu Y. **Quantitative evaluation of PTPN22 copy number variation by digital droplet PCR and association with type 2 diabetes risk.** *Endocr J.* 2021 Feb 28;68(2):153-162. Epub 2020 Sep 17.
671. Ninić A, Bojanin D, Sopić M, Mihajlović M, Munjas J, Milenković T, Stefanović A, Vekić J, Spasojević-Kalimanovska V. **Transforming Growth Factor-β1 and Receptor for Advanced Glycation End Products Gene Expression and Protein Levels in Adolescents with Type 1 diabetes Mellitus.** *J Clin Res Pediatr Endocrinol.* 2021 Feb 26;13(1):61-71. Epub 2020 Sep 17.
672. Camilleri T, Camilleri L, Midolo Y, Papanas N, Gatt A, Formosa C. **Empowering patients living with diabetes mellitus to cease smoking will improve lower limb perfusion.** *J Addict Dis.* 2021 Jan-Mar;39(1):74-80. Epub 2020 Sep 16.
673. de Oliveira MR, de Souza ICC, Brasil FB. **Promotion of Mitochondrial Protection by Emodin in Methylglyoxal-Treated Human Neuroblastoma SH-SY5Y Cells: Involvement of the AMPK/Nrf2/HO-1 Axis.** *Neurotox Res.* 2021 Apr;39(2):292-304. Epub 2020 Sep 15.
674. Gon Y, Nishi K, Sato K, Maes A, Siddiqui S, Hayashi N, Hirata H, Martin UJ, Reisner C. **Efficacy and safety of glycopyrrolate/formoterol fumarate metered dose inhaler delivered using co-suspension delivery technology in Japanese patients with moderate-to-very severe chronic obstructive pulmonary disease.** *Respir Investig.* 2021 Jan;59(1):135-144. Epub 2020 Sep 8.
675. Almalki OM, Soong TC, Lee WJ, Chen JC, Wu CC, Lee YC. **Variation in Small Bowel Length and Its Influence on the Outcomes of Sleeve Gastrectomy.** *Obes Surg.* 2021 Jan;31(1):36-42. Epub 2020 Sep 11.
676. Vidal Flor M, Jansà I, Morató M, Roca Espino D, Viñals Domenech C, Quirós López C, Mesa Pineda Á, Yoldi Vergara C, Cardona-Hernandez R, Giménez Álvarez M, Esmatjes Mompó E, Conget Donlo I. **Results of a specific and structured program in the**

- transition of young patients with type 1 diabetes from the paediatric center to an adult hospital. The experience of a decade. *Endocrinol Diabetes Nutr.* 2021 Feb;68(2):82-91.
677. O'Connor LE, Kim JE, Clark CM, Zhu W, Campbell WW. **Effects of Total Red Meat Intake on Glycemic Control and Inflammatory Biomarkers: A Meta-Analysis of Randomized Controlled Trials.** *Adv Nutr.* 2021 Feb 1;12(1):115-127.
678. Salahuddin T, Richardson V, McNeal DM, Henderson K, Hess PL, Raghavan S, Saxon DR, Valle JA, Waldo SW, Ho PM, Schwartz GG. **Potential unrealized mortality benefit of glucagon-like peptide-1 receptor agonists and sodium-glucose co-transport-2 inhibitors: A report from the Veterans Health Administration Clinical Assessment, Reporting and Tracking program.** *Diabetes Obes Metab.* 2021 Jan;23(1):97-105.
679. Herzig D, Studer D, Nakas CT, Kuenzli C, Stauffer TP, Hovorka R, Bally L. **Effect of fully automated closed-loop insulin delivery using faster aspart versus standard aspart on gluco-regulatory hormones in type 2 diabetes.** *Diabetes Obes Metab.* 2021 Jan;23(1):228-233. Epub 2020 Sep 28.
680. Khdour M, Awadallah HB, Al-Hamed DH. **Assessment of treatment satisfaction and adherence amongst diabetic patients in governmental primary care clinic of Ramallah, West-Bank.** *Hosp Pract (1995).* 2021 Feb;49(1):27-33. Epub 2020 Sep 20.
681. Aitchison RT, Kennedy GJ, Shu X, Mansfield DC, Shahani U. **Sub-clinical thickening of the fovea in diabetes and its relationship to glycaemic control: a study using swept-source optical coherence tomography.** *Graefes Arch Clin Exp Ophthalmol.* 2021 Mar;259(3):633-641. Epub 2020 Sep 8. Erratum in: *Graefes Arch Clin Exp Ophthalmol.* 2020 Oct 16;:
682. Thörling J, Ljungqvist O, Sköldenberg O, Hammarqvist F. **No association between preoperative impaired glucose control and postoperative adverse events following hip fracture surgery - A single-centre observational cohort study.** *Clin Nutr.* 2021 Mar;40(3):1348-1354. Epub 2020 Aug 27.
683. Mormol JD, Basques BA, Harada GK, Louie PK, Alter K, Goldberg E, Colman MW, An HS. **Risk Factors Associated With Development of Urinary Retention Following Posterior Lumbar Spinal Fusion: Special Attention to the Use of Glycopyrrolate in Anesthesia Reversal.** *Spine (Phila Pa 1976).* 2021 Jan 15;46(2):E133-E138.
684. Mattioni Maturana F, Martus P, Zipfel S, NIEß AM. **Effectiveness of HHE versus MICT in Improving Cardiometabolic Risk Factors in Health and Disease: A Meta-analysis.** *Med Sci Sports Exerc.* 2021 Mar 1;53(3):559-573.
685. Balintescu A, Palmgren I, Lipcsey M, Oldner A, Larsson A, Cronhjort M, Lind M, Wernerman J, Mårtensson J. **Prevalence and impact of chronic dysglycemia in intensive care unit patients-A retrospective cohort study.** *Acta Anaesthesiol Scand.* 2021 Jan;65(1):82-91. Epub 2020 Sep 16.
686. Zhou H, Sun L, Zhang S, Wang Y, Wang G. **Effect of long-term growth hormone replacement on glucose metabolism in adults with growth hormone deficiency: a systematic review and meta-analysis.** *Pituitary.* 2021 Feb;24(1):130-142.
687. Crossnohere NL, Janse S, Janssen E, Bridges JFP. **Comparing the Preferences of Patients and the General Public for Treatment Outcomes in Type 2 Diabetes Mellitus.** *Patient.* 2021 Jan;14(1):89-100.
688. Immanuel J, Eagleton C, Baker J, Simmons D. **Pregnancy outcomes among multi-ethnic women with different degrees of hyperglycaemia during pregnancy in an urban New**

- Zealand population and their association with postnatal HbA1c uptake.** *Aust N Z J Obstet Gynaecol.* 2021 Feb;61(1):69-77. Epub 2020 Sep 2.
689. Usman M, Khunti K, Davies MJ, Gillies CL. **Association and relative importance of multiple risk factor control on cardiovascular disease, end-stage renal disease and mortality in people with type 2 diabetes: A population-based retrospective cohort study.** *Prim Care Diabetes.* 2021 Apr;15(2):218-226. Epub 2020 Aug 27.
690. Liu X, Liu H, Lu X, Tombran-Tink J, Zhao S. **PEDF Attenuates Ocular Surface Damage in Diabetic Mice Model Through Its Antioxidant Properties.** *Curr Eye Res.* 2021 Mar;46(3):302-308. 1805770. Epub 2020 Aug 30.
691. Copur S, Siriopol D, Afsar B, Comert MC, Uzunkopru G, Sag AA, Ortiz A, Covic A, van Raalte DH, Cherney DZ, Rossing P, Kanbay M. **Serum glycated albumin predicts all-cause mortality in dialysis patients with diabetes mellitus: meta-analysis and systematic review of a predictive biomarker.** *Acta Diabetol.* 2021 Jan;58(1):81-91.
692. Esmaeili F, Maleki V, Kheirouri S, Alizadeh M. **The Effects of Taurine Supplementation on Metabolic Profiles, Pentosidine, Soluble Receptor of Advanced Glycation End Products and Methylglyoxal in Adults With Type 2 Diabetes: A Randomized, Double-Blind, Placebo-Controlled Trial.** *Can J Diabetes.* 2021 Feb;45(1):39-46. Epub 2020 May 17.
693. Kato M, Negishi Y, Shima Y, Kuwabara Y, Morita R, Takeshita T. **Inappropriate activation of invariant natural killer T cells and antigen-presenting cells with the elevation of HMGB1 in preterm births without acute chorioamnionitis.** *Am J Reprod Immunol.* 2021 Jan;85(1):e13330. Epub 2020 Sep 14.
694. Rigalleau V, Foussard N, Bertrand A, Monlun M, Blanco L, Mohammedi K. **Lung cancer and diabetes: A role for advanced glycation end-products?** *Eur J Clin Invest.* 2021 Jan;51(1):e13389. Epub 2020 Sep 14.
695. Zamora JM, Kong JM. **Case Series of U-500 Insulin Use in Adults With Type 2 Diabetes and Severe Insulin Resistance.** *Can J Diabetes.* 2021 Feb;45(1):55-58.
696. Simões R, Silva LM, de Oliveira AN, Alves MT, Pestana RMC, de Souza IDP, Oliveira HHM, Soares CE, Sabino AP, Gomes KB. **Identification of Clinical and Laboratory Variables Associated with Cardiotoxicity Events Due to Doxorubicin in Breast Cancer Patients: A 1-Year Follow-Up Study.** *Cardiovasc Toxicol.* 2021 Feb;21(2):106-114. Epub 2020 Aug 25.
697. Matsuhisa M, Odawara M, Hirose T, Koshida R, Senda M, Tanaka Y, Terauchi Y. **Real-world data on the use of insulin glargine 300 U/mL in Japanese patients with type 1 diabetes: twelve-month results from a post-marketing surveillance study (X-STAR study).** *Expert Opin Pharmacother.* 2021 Feb;22(2):249-256. Epub 2020 Aug 25.
698. Bener A, Al-Hamaq AOAA, Zughaier SM, Öztürk M, Ömer A. **Assessment of the Role of Serum 25-Hydroxy Vitamin D Level on Coronary Heart Disease Risk With Stratification Among Patients With Type 2 Diabetes Mellitus.** *Angiology.* 2021 Jan;72(1):86-92. Epub 2020 Aug 25.
699. Jammah AA. **Indirect comparison of efficacy and safety of insulin glargine/lixisenatide and insulin degludec/insulin aspart in type 2 diabetes patients not controlled on basal insulin.** *Prim Care Diabetes.* 2021 Feb;15(1):132-137. Epub 2020 Aug 21.
700. Antonio-Villa NE, Palma-Moreno BG, Rodríguez-Dávila FM, Gómez-Pérez FJ, Aguilar-Salinas CA, Hernández-Jiménez S, García-Ulloa AC, Almeda-Valdes P. **Use of an electronic integral monitoring system for patients with diabetes to identify factors**

- associated with an adequate glycemic goal and to measure quality of care. *Prim Care Diabetes*. 2021 Feb;15(1):162-168. Epub 2020 Aug 20.
701. Cua S, Humeidan M, Beal EW, Brethauer S, Pervo V, Papio J, Husain S, Moffatt-Bruce S. **The Effect of an Enhanced Recovery Protocol on Colorectal Surgery Patients With Diabetes.** *J Surg Res*. 2021 Jan;257:153-160. Epub 2020 Aug 20.
702. Takim K. **Bioactive component analysis and investigation of antidiabetic effect of Jerusalem thorn (*Paliurus spina-christi*) fruits in diabetic rats induced by streptozotocin.** *J Ethnopharmacol*. 2021 Jan 10;264:113263. Epub 2020 Aug 18.
703. Fraser BJ, Blizzard L, Buscot MJ, Schmidt MD, Dwyer T, Venn AJ, Magnussen CG. **The Association Between Grip Strength Measured in Childhood, Young- and Mid-adulthood and Prediabetes or Type 2 Diabetes in Mid-adulthood.** *Sports Med*. 2021 Jan;51(1):175-183.
704. Calvo-Hueros JI, Cañón-Barroso L, Morales-Gabardino JA, Buitrago F. **Cardiovascular risk and validation of cardiovascular risk prediction functions in a cohort of patients with type 2 diabetes followed for 10 years in Badajoz (SPAIN). AN observational study.** *Prim Care Diabetes*. 2021 Feb;15(1):115-120. Epub 2020 Aug 15.
705. Sourris KC, Watson A, Jandeleit-Dahm K. **Inhibitors of Advanced Glycation End Product (AGE) Formation and Accumulation.** *Handb Exp Pharmacol*. 2021;264:395-423.
706. Kurimoto SI, Fujita H, Kawaguchi S, Sasaki YF, Nakamura T, Kubota T. **Kamiohnoynesides A and B, two new polyacetylene glycosides from flowers of edible *Chrysanthemum* "Kamiohno".** *J Nat Med*. 2021 Jan;75(1):167-172. Epub 2020 Aug 17.
707. Ali Abdelhamid Y, Phillips LK, White MG, Presneill J, Horowitz M, Deane AM. **Survivors of Intensive Care With Type 2 Diabetes and the Effect of Shared-Care Follow-Up Clinics: The SWEET-AS Randomized Controlled Pilot Study.** *Chest*. 2021 Jan;159(1):174-185. Epub 2020 Aug 12.
708. Pylypjuk C, Sellers E, Wicklow B. **Perinatal Outcomes in a Longitudinal Birth Cohort of First Nations Mothers With Pregestational Type 2 Diabetes and Their Offspring: The Next Generation Study.** *Can J Diabetes*. 2021 Feb;45(1):27-32. Epub 2020 May 13.
709. Sivachandran N, Ahmad A, Qian J, Moinul P, Barbosa J, Farrokhyar F, Chaudhary V. **Baseline Diabetes Knowledge Assessment Amongst Adults With Type 1 and Type 2 Diabetes Receiving Eye Care at a Tertiary Ophthalmic Centre in Canada.** *Can J Diabetes*. 2021 Feb;45(1):22-26. Epub 2020 May 8.
710. Ofosu FK, Elahi F, Daliri EB, Tyagi A, Chen XQ, Chelliah R, Kim JH, Han SI, Oh DH. **UHPLC-ESI-QTOF-MS/MS characterization, antioxidant and antidiabetic properties of sorghum grains.** *Food Chem*. 2021 Feb 1;337:127788. Epub 2020 Aug 7.
711. Wölk M, Milkovska-Stamenova S, Schröter T, Hoffmann R. **Influence of seasonal variation and processing on protein glycation and oxidation in regular and hay milk.** *Food Chem*. 2021 Feb 1;337:127690. Epub 2020 Aug 6.
712. Grillet PE, Le Souder C, Rohou J, Cazorla O, Charriot J, Bourdin A. **Glycopyrrolate and formoterol fumarate for the treatment of COPD.** *Expert Rev Respir Med*. 2021 Jan;15(1):13-25. Epub 2020 Oct 12.
713. Jin SM, Ahn J, Park J, Hur KY, Kim JH, Lee MK. **East Asian diet-mimicking diet plan based on the Mediterranean diet and the Dietary Approaches to Stop Hypertension diet in adults with type 2 diabetes: A randomized controlled trial.** *J Diabetes Investig*. 2021 Mar;12(3):357-364. Epub 2020 Sep 14.

714. Sun X, Li X, Tang J, Lai K, Rasco BA, Huang Y. **Formation of protein-bound N^ε-carboxymethyllysine and N^ε-carboxyethyllysine in ground pork during commercial sterilization as affected by the type and concentration of sugars.** *Food Chem.* 2021 Jan 30;336:127706. Epub 2020 Jul 30.
715. Hjorth P, Petersen SM, Launholt TL, Nielsen CT. **Effect of apple vinegar intake on metabolic parameters and constipation in patients with schizophrenia treated with clozapine: a pilot study.** *Nord J Psychiatry.* 2021 Feb;75(2):152-154. Epub 2020 Aug 7.
716. Schuh CMAP, Benso B, Naulin PA, Barrera NP, Bozec L, Aguayo S. **Modulatory Effect of Glycated Collagen on Oral Streptococcal Nanoadhesion.** *J Dent Res.* 2021 Jan;100(1):82-89. Epub 2020 Aug 6.
717. Meek CL, Lindsay RS, Scott EM, Aiken CE, Myers J, Reynolds RM, Simmons D, Yamamoto JM, McCance DR, Murphy HR. **Approaches to screening for hyperglycaemia in pregnant women during and after the COVID-19 pandemic.** *Diabet Med.* 2021 Jan;38(1):e14380. Epub 2020 Sep 21.
718. Dover AR, Ritchie SA, McKnight JA, Strachan MWJ, Zammit NN, Wake DJ, Forbes S, Stimson RH, Gibb FW. **Assessment of the effect of the COVID-19 lockdown on glycaemic control in people with type 1 diabetes using flash glucose monitoring.** *Diabet Med.* 2021 Jan;38(1):e14374. Epub 2020 Sep 28.
719. Krishnan V, Rani R, Awana M, Pitale D, Kulshreshta A, Sharma S, Bollinedi H, Singh A, Singh B, Singh AK, Praveen S. **Role of nutraceutical starch and proanthocyanidins of pigmented rice in regulating hyperglycemia: Enzyme inhibition, enhanced glucose uptake and hepatic glucose homeostasis using in vitro model.** *Food Chem.* 2021 Jan 15;335:127505. Epub 2020 Jul 11.
720. McGill JB, Weiss D, Grant M, Jones MC, Kendall DM, Hoogwerf BJ. **Understanding inhaled Technosphere Insulin: Results of an early randomized trial in type 1 diabetes mellitus.** *J Diabetes.* 2021 Feb;13(2):164-172. Epub 2020 Sep 4.
721. Im K, Ju H, Lee M, Joo BE, Kwon KY, Roh H, Ahn MY, Hwang HW, Lee KB. **Recent glycemic control can predict the progressive motor deficits of acute subcortical infarction with diabetes or prediabetes.** *Neurol Sci.* 2021 Jan;42(1):285-291.
722. Chiang A, Garg SJ, Klufas MA, Ho AC, Hill L, Tsuboi M, Stoilov I. **Ultra- Response to Ranibizumab: Improvement by 4 or More Steps in Diabetic Retinopathy Severity in Diabetic Retinopathy Clinical Research Network Protocol S.** *Ophthalmol Retina.* 2021 Mar;5(3):251-260. Epub 2020 Jul 29.
723. Bengtson CD, Kim MD, Anabtawi A, He J, Dennis JS, Miller S, Yoshida M, Baumlin N, Salathe M. **Hyperglycaemia in cystic fibrosis adversely affects BK channel function critical for mucus clearance.** *Eur Respir J.* 2021 Jan 14;57(1):2000509.
724. Ruggeri RM, Giovinazzo S, Barbalace MC, Cristani M, Alibrandi A, Vicchio TM, Giuffrida G, Aguenouz MH, Malaguti M, Angeloni C, Trimarchi F, Hrelia S, Campenni A, Cannavò S. **Influence of Dietary Habits on Oxidative Stress Markers in Hashimoto's Thyroiditis.** *Thyroid.* 2021 Jan;31(1):96-105. Epub 2020 Nov 12.
725. Langeh U, Singh S. **Targeting S100B Protein as a Surrogate Biomarker and its Role in Various Neurological Disorders.** *Curr Neuroparmacol.* 2021;19(2):265-277.
726. Pompano LM, Boy E. **Effects of Dose and Duration of Zinc Interventions on Risk Factors for Type 2 Diabetes and Cardiovascular Disease: A Systematic Review and Meta-Analysis.** *Adv Nutr.* 2021 Feb 1;12(1):141-160.

727. Vajravelu ME, Lee JM, Amaral S, Kelly A. **Sex-based differences in screening and recognition of pre-diabetes and type 2 diabetes in pediatric primary care.** *Pediatr Obes.* 2021 Feb;16(2):e12699. Epub 2020 Jul 26.
728. Ghorbaninejad P, Djafarian K, Babae N, Davarzani S, Ebaditabar M, Clark CCT, Shab-Bidar S. **A negative association of dietary advanced glycation end products with obesity and body composition in Iranian adults.** *Br J Nutr.* 2021 Feb 28;125(4):471-480.
729. Battelino T, Edelman SV, Nishimura R, Bergenstal RM. **Comparison of Second-Generation Basal Insulin Analogs: A Review of the Evidence from Continuous Glucose Monitoring.** *Diabetes Technol Ther.* 2021 Jan;23(1):20-30. Epub 2020 Sep 21.
730. Ding HX, Ma HF, Xing N, Hou L, Zhou CX, Du YP, Wang FJ. **Five-year follow-up observation of interventional therapy for lower extremity vascular disease in type 2 diabetes and analysis of risk factors for restenosis.** *J Diabetes.* 2021 Feb;13(2):134-142.
731. Prantner D, Nallar S, Richard K, Spiegel D, Collins KD, Vogel SN. **Classically activated mouse macrophages produce methylglyoxal that induces a TLR4- and RAGE-independent proinflammatory response.** *J Leukoc Biol.* 2021 Mar;109(3):605-619.
732. Okada E, Okada C, Matsumoto M, Fujiwara A, Takimoto H. **Dietary sodium:potassium ratio and CVD risk factors among Japanese adults: a retrospective cross-sectional study of pooled data from the National Health and Nutrition Survey, 2003-2017.** *Br J Nutr.* 2021 Jan 14;125(1):79-91. Epub 2020 Jul 17.
733. Takahashi H, Nishimura R. **Is it possible to predict the onset of nocturnal asymptomatic hypoglycemia in patients with type 1 diabetes receiving insulin degludec? Potential role of previous day and next morning glucose values.** *J Diabetes Investig.* 2021 Mar;12(3):365-373. Epub 2020 Aug 25.
734. Steenbeke M, De Bruyne S, De Buyzere M, Lapauw B, Speeckaert R, Petrovic M, Delanghe JR, Speeckaert MM. **The role of soluble receptor for advanced glycation end-products (sRAGE) in the general population and patients with diabetes mellitus with a focus on renal function and overall outcome.** *Crit Rev Clin Lab Sci.* 2021 Mar;58(2):113-130. Epub 2020 Jul 15.
735. Esmeralda CAC, David PE, Maldonado IC, Ibrahim SNA, David AS, Escorza MAQ, Dealmy DG. **Deranged Fractional Excretion of Magnesium and Serum Magnesium Levels in Relation to Retrograde Glycaemic Regulation in Patients with Type 2 Diabetes Mellitus.** *Curr Diabetes Rev.* 2021;17(1):91-100.
736. Janšáková K, Escudier M, Tóthová L, Proctor G. **Salivary changes in oxidative stress related to inflammation in oral and gastrointestinal diseases.** *Oral Dis.* 2021 Mar;27(2):280-289. Epub 2020 Jul 30.
737. Maegawa H, Ishigaki Y, Langer J, Saotome-Nakamura A, Andersen M; Japan Diabetes Clinical Data Management (JDDM) Study Group. **Clinical inertia in patients with type 2 diabetes treated with oral antidiabetic drugs: Results from a Japanese cohort study (JDDM53).** *J Diabetes Investig.* 2021 Mar;12(3):374-381. Epub 2020 Sep 1.
738. Aihara M, Kubota N, Minami T, Shirakawa R, Sakurai Y, Hayashi T, Iwamoto M, Takamoto I, Kubota T, Suzuki R, Usami S, Jinnouchi H, Aihara M, Yamauchi T, Sakata T, Kadowaki T. **Association between tear and blood glucose concentrations: Random intercept model adjusted with confounders in tear samples negative for occult blood.** *J Diabetes Investig.* 2021 Feb;12(2):266-276. Epub 2020 Aug 30.

739. Lai CCK, Md Nor N, Kamaruddin NA, Jamil A, Safian N. **Comparison of transepidermal water loss and skin hydration in diabetics and nondiabetics.** *Clin Exp Dermatol.* 2021 Jan;46(1):58-64. Epub 2020 Sep 30.
740. Sreeram S, Gupta D, Hanaganahalli Basavaiah S, Hegde A. **HbC Revealed in A1C Assay: A Lesson Learnt From a Routine Health Checkup.** *J Diabetes Sci Technol.* 2021 Jan;15(1):193-194. Epub 2020 Jul 3.
741. Varikasuvu SR, Aloori S, Bhongir AV. **Higher skin autofluorescence detection using AGE-Reader™ technology as a measure of increased tissue accumulation of advanced glycation end products in dialysis patients with diabetes: a meta-analysis.** *J Artif Organs.* 2021 Mar;24(1):44-57. Epub 2020 Jul 1.
742. Fragala MS, Kaufman HW, Meigs JB, Niles JK, McPhaul MJ. **Consequences of the COVID-19 Pandemic: Reduced Hemoglobin A1c Diabetes Monitoring.** *Popul Health Manag.* 2021 Feb;24(1):8-9. Epub 2020 Jun 29.
743. Utsunomiya K, Koshida R, Kakiuchi S, Senda M, Fujii S, Kurihara Y, Gunji R, Kaku K. **Safety and effectiveness of tofogliflozin in Japanese patients with type 2 diabetes mellitus treated in real-world clinical practice: Results of a 36-month post-marketing surveillance study (J-STEP/LT).** *J Diabetes Investig.* 2021 Feb;12(2):184-199.
744. Kuroda N, Kusunoki Y, Osugi K, Ohigashi M, Azuma D, Ikeda H, Makino S, Otsuka A, Tamada D, Watanabe N, Washio K, Tsunoda T, Matsuo T, Konishi K, Katsuno T, Koyama H; Hyogo Diabetes Hypoglycemia Cognition Complications (HDHCC) study group. **Relationships between time in range, glycemic variability including hypoglycemia and types of diabetes therapy in Japanese patients with type 2 diabetes mellitus: Hyogo Diabetes Hypoglycemia Cognition Complications study.** *J Diabetes Investig.* 2021 Feb;12(2):244-253. Epub 2020 Aug 2.
745. Chakravarti HN, Nag A. **Efficacy and safety of hydroxychloroquine as add-on therapy in uncontrolled type 2 diabetes patients who were using two oral antidiabetic drugs.** *J Endocrinol Invest.* 2021 Mar;44(3):481-492. Epub 2020 Jun 27.
746. Chiba K, Nomoto H, Nakamura A, Cho KY, Yamashita K, Shibayama Y, Miya A, Kameda H, Kurihara Y, Aoki S, Atsumi T, Miyoshi H. **Sodium-glucose cotransporter 2 inhibitors reduce day-to-day glucose variability in patients with type 1 diabetes.** *J Diabetes Investig.* 2021 Feb;12(2):176-183. Epub 2020 Aug 2.
747. Wang SY, Shen TT, Xi BL, Shen Z, Zhang X. **Vitamin D affects the neutrophil-to-lymphocyte ratio in patients with type 2 diabetes mellitus.** *J Diabetes Investig.* 2021 Feb;12(2):254-265. Epub 2020 Aug 2.
748. Katsuragawa S, Tsurutani Y, Takiguchi T, Saito J, Nishikawa T. **Impact of primary aldosteronism on renal function in patients with type 2 diabetes.** *J Diabetes Investig.* 2021 Feb;12(2):217-225. Epub 2020 Jul 26.
749. Islam MS. **Diabetes: From Research to Clinical Practice.** *Adv Exp Med Biol.* 2021;1307:1-5.
750. Safwat NA, ELkhamisy MM, Abdel-Wahab SEA, Hamza MT, Boshnak NH, Kenny MA. **Polymorphisms of the receptor for advanced glycation end products as vasculopathy predictor in sickle cell disease.** *Pediatr Res.* 2021 Jan;89(1):185-190. Epub 2020 Jun 16.
751. Eckold C, Kumar V, Weiner J, Alisjahbana B, Riza AL, Ronacher K, Coronel J, Kerry-Barnard S, Malherbe ST, Kleynhans L, Stanley K, Ruslami R, Ioana M, Ugarte-Gil C, Walzl G, van Crevel R, Wijmenga C, Critchley JA, Dockrell HM, Cliff JM; TANDEM consortium. **Impact of Intermediate Hyperglycemia and Diabetes on Immune Dysfunction in Tuberculosis.** *Clin Infect Dis.* 2021 Jan 23;72(1):69-78.

752. Jia S, Wang Z, Han R, Zhang Z, Li Y, Qin X, Zhao M, Xiang R, Yang J. **Incretin mimetics and sodium-glucose co-transporter 2 inhibitors as monotherapy or add-on to metformin for treatment of type 2 diabetes: a systematic review and network meta-analysis.** *Acta Diabetol.* 2021 Jan;58(1):5-18. Epub 2020 Jun 8.
753. Ajiboye BO, Oyinloye BE, Owero-Ozeze OS, Okesola MA, Ekakitie IL, Ojo OA, Kappo AP. **Aqueous extract of Solanum macrocarpon Linn leaves abates hyperglycaemia and expression of glucose transporters gene in alloxan-induced diabetic rats.** *J Endocrinol Invest.* 2021 Feb;44(2):265-276. Epub 2020 Jun 5.
754. Krishnan B, Prasad GA, Saravanan R, Madhan B, Kadiravan T. **Do preoperative glycosylated hemoglobin (HbA1C) and random blood glucose levels predict wound healing complications following exodontia in type 2 diabetes mellitus patients?-a prospective observational study.** *Clin Oral Investig.* 2021 Jan;25(1):179-185.
755. Gaytán Martínez LA, Sánchez-Ruiz LA, Zuñiga LY, González-Ortiz M, Martínez-Abundis E. **Effect of *Gymnema sylvestre* Administration on Glycemic Control, Insulin Secretion, and Insulin Sensitivity in Patients with Impaired Glucose Tolerance.** *J Med Food.* 2021 Jan;24(1):28-32. Epub 2020 May 27.
756. Zhu Z, Fang R, Zhao D, Huang M, Wei Y. **N^ε-carboxymethyllysine and N^ε-carboxyethyllysine kinetics and water loss analysis during chicken braising.** *J Sci Food Agric.* 2021 Jan 30;101(2):388-397. Epub 2020 Oct 1.
757. Kulkarni YA, Suryavanshi SV. **Combination of Naringenin and Lisinopril Ameliorates Nephropathy in Type-1 Diabetic Rats.** *Endocr Metab Immune Disord Drug Targets.* 2021;21(1):173-182.
758. Pai YW, Tang CL, Lin CH, Lin SY, Lee IT, Chang MH. **Glycaemic control for painful diabetic peripheral neuropathy is more than fasting plasma glucose and glycated haemoglobin.** *Diabetes Metab.* 2021 Feb;47(1):101158. Epub 2020 May 12.
759. Molina-Montes E, Coscia C, Gómez-Rubio P, Fernández A, Boenink R, Rava M, Márquez M, Molero X, Löhr M, Sharp L, Michalski CW, Farré A, Perea J, O'Rorke M, Greenhalf W, Iglesias M, Tardón A, Gress TM, Barberá VM, Crnogorac-Jurcevic T, Muñoz-Bellvis L, Dominguez-Muñoz JE, Renz H, Balcells J, Costello E, Ilzarbe L, Kleeff J, Kong B, Mora J, O'Driscoll D, Poves I, Scarpa A, Yu J, Hidalgo M, Lawlor RT, Ye W, Carrato A, Real FX, Malats N; PanGenEU Study Investigators. **Deciphering the complex interplay between pancreatic cancer, diabetes mellitus subtypes and obesity/BMI through causal inference and mediation analyses.** *Gut.* 2021 Feb;70(2):319-329.
760. Ducos C, Rigo M, Larroumet A, Delyfer MN, Korobelnik JF, Monlun M, Foussard N, Poupon P, Haissaguerre M, Blanco L, Mohammedi K, Rigalleau V. **Diabetic retinopathy in well-controlled type 2 diabetes: Role of glycaemic memory.** *Diabetes Metab.* 2021 Feb;47(1):101156. Epub 2020 May 6.
761. Çetinkaya Altuntaş S, Evran M, Gürkan E, Sert M, Tetiker T. **HbA1c level decreases in iron deficiency anemia.** *Wien Klin Wochenschr.* 2021 Feb;133(3-4):102-106. E
762. Tsujita R, Tsubota M, Sekiguchi F, Kawabata A. **Role of high-mobility group box 1 and its modulation by thrombomodulin/thrombin axis in neuropathic and inflammatory pain.** *Br J Pharmacol.* 2021 Feb;178(4):798-812. Epub 2020 Jun 3.
763. Xin C, Wang Y, Liu M, Zhang B, Yang S. **Correlation analysis between advanced glycation end products detected noninvasively and skin aging factors.** *J Cosmet Dermatol.* 2021 Jan;20(1):243-248. Epub 2020 May 13.
764. Ting CY, Ahmad Zaidi Aduce S, Lim CJ, Abd Jabar AHA, Ting RS, Ting H, Osman NA, Ngau E, Talin BA, Muhammad M, Loo SC, Lim SE, Hassali MA. **Effectiveness of a**

- pharmacist-led structured group-based intervention in improving medication adherence and glycaemic control among type 2 diabetes mellitus patients: A randomized controlled trial. *Res Social Adm Pharm.* 2021 Feb;17(2):344-355.
765. Palaseweenun P, Hagen-Plantinga EA, Schonewille JT, Koop G, Butre C, Jonathan M, Wierenga PA, Hendriks WH. **Urinary excretion of advanced glycation end products in dogs and cats.** *J Anim Physiol Anim Nutr (Berl).* 2021 Jan;105(1):149-156.
766. Maranta F, Cianfanelli L, Cianflone D. **Glycaemic Control and Vascular Complications in Diabetes Mellitus Type 2.** *Adv Exp Med Biol.* 2021;1307:129-152.
767. Higashimori M, Ishikawa K, Gillen M, Zhou D. **Physiologically Based Pharmacokinetic Modelling of Glycopyrronium in Patients With Renal Impairment.** *J Pharm Sci.* 2021 Jan;110(1):438-445. Epub 2020 Mar 30.
768. Shi LL, Ma J, Deng YK, Chen CL, Wang H, Cao PP, Long XB, Zeng M, Liu Z. **Cold-inducible RNA-binding protein contributes to tissue remodeling in chronic rhinosinusitis with nasal polyps.** *Allergy.* 2021 Feb;76(2):497-509. Epub 2020 Apr 6.
769. Naqvi IH, Talib A, Naqvi SH, Yasin L, Rizvi NZ. **The Neuro-Vascular Consequence of Diabetes: Foot Amputation and Evaluation of its Risk Factors and Health-Related Economic Impact.** *Curr Vasc Pharmacol.* 2021;19(1):102-109.
770. Davidsson L, Alkhabbaz E, Vijayan V, Alhubail A, Shaltout A, Alkandari H. **Intermediate hyperglycaemia, insulin resistance and metabolic syndrome among obese Arab children (12-17 years old) in Kuwait.** *Prim Care Diabetes.* 2021 Feb;15(1):191-193.
771. Law S, Davenport A. **The effect of glucose absorption from peritoneal dialysates on changes in lipid profiles in prevalent peritoneal dialysis patients.** *Perit Dial Int.* 2021 Jan;41(1):115-117. Epub 2020 Feb 10.
772. Šebeková K, Gurecká R, Csongová M, Koborová I, Šebek J. **Elevated blood pressure-associated cardiometabolic risk factors and biomarkers in 16-23 years old students with or without metabolic abnormalities.** *J Hum Hypertens.* 2021 Jan;35(1):37-48.
773. Wilkinson HN, Hardman MJ. **Wound senescence: A functional link between diabetes and ageing?** *Exp Dermatol.* 2021 Jan;30(1):68-73. Epub 2020 Feb 21.
774. Kuchay MS, Farooqui KJ, Mishra SK, Mithal A. **Glucose Lowering Efficacy and Pleiotropic Effects of Sodium-Glucose Cotransporter 2 Inhibitors.** *Adv Exp Med Biol.* 2021;1307:213-230.
775. Khan MS, Tabrez S, Al-Okail MS, Shaik GM, Bhat SA, Rehman TM, Husain FM, AlAjmi MF. **Non-enzymatic glycation of protein induces cancer cell proliferation and its inhibition by quercetin: Spectroscopic, cytotoxicity and molecular docking studies.** *J Biomol Struct Dyn.* 2021 Feb;39(3):777-786. Epub 2020 Feb 12.
776. Costa-Cordella S, Luyten P, Cohen D, Mena F, Fonagy P. **Mentalizing in mothers and children with type 1 diabetes.** *Dev Psychopathol.* 2021 Feb;33(1):216-225.
777. Xu Y, Dunn TC, Ajjan RA. **A Kinetic Model for Glucose Levels and Hemoglobin A1c Provides a Novel Tool for Individualized Diabetes Management.** *J Diabetes Sci Technol.* 2021 Mar;15(2):294-302. Epub 2020 Jan 8.
778. Sarmah S, Pahari S, Das S, Belwal VK, Jana M, Singha Roy A. **Non-enzymatic glycation of human serum albumin modulates its binding efficacy towards bioactive flavonoid chrysin: A detailed study using multi-spectroscopic and computational methods.** *J Biomol Struct Dyn.* 2021 Feb;39(2):476-492. Epub 2020 Jan 20.
779. Davis TME, Drinkwater JJ, Fegan PG, Chikkaveerappa K, Sillars B, Davis WA. **Community-based management of complex type 2 diabetes: adaptation of an**

- integrated model of care in a general practice setting.** *Intern Med J.* 2021 Jan;51(1):62-68.
780. Shivaprasad C, Aiswarya Y, Kejal S, Sridevi A, Anupam B, Ramdas B, Gautham K, Aarudhra P. **Comparison of CGM-Derived Measures of Glycemic Variability Between Pancreatogenic Diabetes and Type 2 Diabetes Mellitus.** *J Diabetes Sci Technol.* 2021 Jan;15(1):134-140. Epub 2019 Jul 7.
781. Sadler JR, Shearrer GE, Burger KS. **Alterations in ventral attention network connectivity in individuals with prediabetes.** *Nutr Neurosci.* 2021 Feb;24(2):140-147.
782. Tseng YT, Hsu HT, Lee TY, Chang WH, Lo YC. **Naringenin, a dietary flavanone, enhances insulin-like growth factor 1 receptor-mediated antioxidant defense and attenuates methylglyoxal-induced neurite damage and apoptotic death.** *Nutr Neurosci.* 2021 Jan;24(1):71-81. Epub 2019 Mar 22.
783. Ostojic P, Knezevic-Apostolski S, Djurovic N, Stojic B, Jankovic K, Bartolovic D. **Neurological and electroneurography findings in patients with systemic sclerosis and symptoms of neuropathic pain in extremities.** *Acta Neurol Belg.* 2021 Feb;121(1):205-209. Epub 2018 Nov 21.