



**3<sup>rd</sup>**

# International Endocrine Conference 2020

*Translating evidence to clinical practice*

**20-21 November 2020 | Virtual Platform**

BES Official Website: <https://www.bes-org.net>  
BES CON 2020 Website: <https://www.besendocon.com>

**Scientific Partner**



# Acknowledgements

## Platinum



## Gold



## Silver



## Bronze



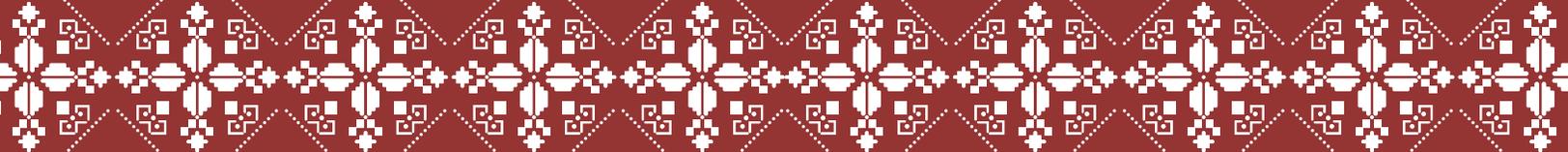
## Others





# International Endocrine Conference 2020

**Abstract book**



**Published on**

---

November 2020, Dhaka, Bangladesh

**Published by**

---

Publication sub-committee (BES)  
3rd International Endocrine Conference 2020

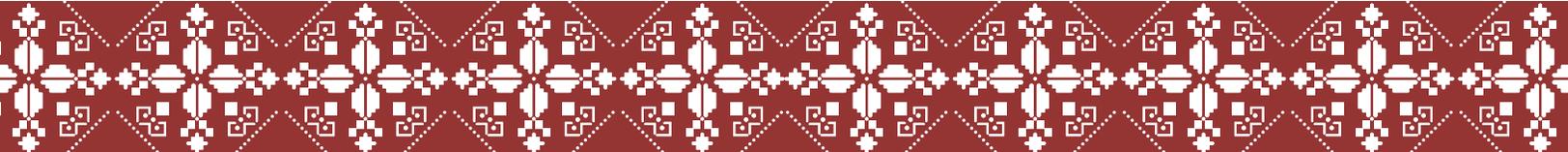
**Design**

---

**Jhumur ad Design**

*Cell: 01961044767*





# Contents

---

- 04** | **Message**
  - 07** | **Organizing Committees**
  - 12** | **BES Life Members**
  - 17** | **BES General Members**
  - 19** | **Associate Members**
  - 21** | **Abstracts**
  - 32** | **Participants List**
  - 45** | **BES Membership Guideline**
- 



## **Message From Honorary President** **To all members of the Bangladesh Endocrine Society (BES)**

---

It's a great pleasure for me to know that Bangladesh Endocrine Society is going to organize the 3rd International Endocrine Conference on 20th and 21st November 2020.

Endocrinology has established itself as a superspecialized subject in the field of medicine over the last few decades in this country. Bangladesh Endocrine Society has been working for the advancement of Endocrinology for the last two decades. The society maintains effective collaboration with other clinical disciplines and organizations at home and abroad.

I wish their great success.

**Prof. A K Azad Khan**  
Honorary President, BES  
Bangladesh Diabetic Somity



## Message From President

To all members of the Bangladesh Endocrine Society (BES)

---

It's my immense pleasure to welcome all the distinguished faculties and participants to the 3rd International Endocrine Conference to be held on 20th and 21st November 2020. Bangladesh Endocrine Society has proved itself as the leading platform for the endocrinologists in Bangladesh for their academic and professional advancement by encouraging clinical activities and research. As a part of this, BES regularly arranges international programs so that the endocrinologists can enrich their knowledge by exchanging views with the distinguished endocrinologists across the globe. In the face of the ongoing COVID-19 pandemic, BES is going to arrange the conference on virtual platform. The upcoming conference will be highly valued by scientific sessions conducted by renowned experts from home and abroad. We hope that the conference will enlighten all the participants and play role in further improvement of our clinical practice.

I wish the conference a grand success.

**Prof Md Faruque Pathan**

President  
Bangladesh Endocrine Society



## Message From General Secretary, BES

### To all members of the Bangladesh Endocrine Society (BES)

---

It's my pleasure and honor to welcome you all to the 3rd International Endocrine Conference of Bangladesh Endocrine Society, to be held on 20th and 21st November 2020. Due to COVID-19 pandemic, we have planned to organize this program in a virtual platform. Bangladesh Endocrine Society has been working for the last 27 years for the advancement of Endocrinology in Bangladesh. For the last few years we have enhanced our activities. Last year we have successfully arranged our 2nd International Endocrine Conference. This year COVID-19 pandemic has hampered many of our regular and proposed activities. But we tried to come forward even with this new odd situation. We have done many scientific programs and meetings using virtual platform. We have formulated 'BES Practical Recommendations for Management of Diabetes and other Endocrine Diseases in Patients with COVID-19' and disseminated by virtual programs. The upcoming 3rd International Endocrine Conference, we hope, will be far more interesting as well as enlightening for the endocrinologists in a new flavor of virtual platform. This conference will be conducted and guided by renowned national and international faculties. The virtual experience will be an opportunity to meet, interact and share the views of latest advance in the field of endocrinology. I am delighted to inform you that International Society of Endocrinology (ISE) and South Asian Federation of Endocrine Societies (SAFES) will be our scientific partners in the program.

I believe that all of you will enjoy the program.

I express my gratitude to the organizers, faculties and scientific partners for their invaluable contribution and relentless effort to make this conference successful.

With the best regards

**Prof. Md. Hafizur Rahman**

General Secretary  
Bangladesh Endocrine Society

# 3rd BES International Conference Organizing and Subcommittees (BESCON 2020)

## 1) Organizing Committee

- a. Convenor – Prof. M Faruque Pathan
- b. Member Secretary – Prof. Md Hafizur Rahman
- c. Co-ordinator – Dr. Faria Afsana
- d. Joint Coordinator – Dr. Shahjada Selim
- e. Members – All EC Members

## 2) Registration Subcommittee

- a. Convenor  
Prof. Mir Mosarraf Hossain
- b. Member Secretary  
Dr. M Saifuddin
- c. Members  
Dr. Faria Afsana  
Dr. Md Azizul Haque  
Dr. Nazmul Kabir Qureshi  
Dr. Marufa Mustari  
Dr. Tanjina Hossain  
Dr. ABM Kamrul Hasan  
Dr. Debashis Kumar Ghosh  
Dr. Abdul Hannan (Tareq)  
Dr. Samir Kumar Talukder  
Dr. Md Mahboob Iftekhar  
Dr. Kazi Nazmul Hossain  
Dr Mostafa Hasan Rajib  
Dr. Imtiaz Mahbub  
Dr. Shankar Barua  
Dr. Md Abu Bakar  
Dr Dahlia Sultana

### 3) Publication

- a. **Convenor** – Professor Md Hafizur Rahman
- b. **Member secretary** – Dr. Ahmed Salam Mir
- c. **Members** – Prof. Md Faruque Pathan, Prof. Md Abu Sayeed, Dr. Shahjada Selim  
Dr. Tanjina Hossain, Dr. Nazmul Kabir Qureshi, Dr. A B M Kamrul Hasan

### 4) Event Management

- a. **Faculty Supervision**
  - i. Co-ordinator – Dr. Shahjada Selim
- b. **Scientific events**
  - i. Co-ordinator – Dr. Nazmul Kabir Qureshi
- c. **Audio-visual**
  - i. Co-ordinator – Dr. Tanjina Hossain
- d. **Posters**
  - i. Co-ordinator – Dr. A B M Kamrul Hasan
- e. **Media**
  - i. Co-ordinator – Dr. Shahjada Selim
  - ii. Members – Dr. Tanjina Hossain, Dr. M Saifuddin

### 5) Board of advisors

Maj Gen (Rtd) Prof. A R Khan  
Prof. Hajera Mahtab  
Prof. A K Azad Khan  
Prof. Zafar Ahmed Latif  
Prof. Liaquat Ali  
Prof. Md Abu Sayeed  
Prof. M A Mannan

## BES Executive Committee 2018 - 2020



<b>Prof Md Faruque Pathan</b>	<b>President</b>
<b>Prof S M Ashrafuzzaman</b>	<b>Vice-President</b>
<b>Prof M A Hasanat</b>	<b>Vice-President</b>
<b>Dr M A Samad</b>	<b>Vice-President</b>
<b>Prof Md Hafizur Rahman</b>	<b>General Secretary</b>
<b>Dr Ahsanul Hauqe Amin</b>	<b>Joint Secretary</b>
<b>Dr Faria Afsana</b>	<b>Treasurer</b>
<b>Dr Shahjada Selim</b>	<b>Organizing Secretary</b>
<b>Dr M Saifuddin</b>	<b>Joint Organizing Secretary</b>
<b>Dr A H M Aktaruzzaman</b>	<b>Joint Organizing Secretary</b>
<b>Dr Md Azizul Haque</b>	<b>Joint Organizing Secretary</b>
<b>Dr Abdul Hannan (Tareq)</b>	<b>Joint Organizing Secretary</b>
<b>Dr Ahmed Salam Mir</b>	<b>Publication Secretary</b>
<b>Dr Kazi Ali Hasan</b>	<b>International Affair Secretary</b>
<b>Dr Nazmul Kabir Qureshi</b>	<b>Scientific &amp; Research Secretary</b>
<b>Dr C M Delwar Rana</b>	<b>Member</b>
<b>Prof Laique Ahmed Khan</b>	<b>Member</b>
<b>Prof Md Fariduddin</b>	<b>Member</b>
<b>Dr Mir Mosarraf Hossain</b>	<b>Member</b>
<b>Dr Tanjina Hossain</b>	<b>Member</b>
<b>Dr Sultana Marufa Shefin</b>	<b>Member</b>
<b>Dr Tahniyah Haq</b>	<b>Member</b>
<b>Dr Marufa Mustari</b>	<b>Member</b>
<b>Dr A B M Kamrul Hasan</b>	<b>Member</b>
<b>Dr Debasish Kumar Ghosh</b>	<b>Member</b>

## BES Subcommittees

### 1) Membership committee

- a. **Convenor** – Prof. S M Ashrafuzzaman
- b. **Member Secretary** – Dr. Shahjada Selim
- c. **Member** – Dr. Marufa Mustari

### 2) Post creation committee

- a. **Convenor** – Dr. Shahjada Selim
- b. **Member secretary** – Dr. M Saifuddin
- c. **Members** – President & General Secretary, Dr. C M Delwar Rana, Prof. M A Hasanat, Prof. Mir Mosarraf Hossain, Dr. Md Azizul Haque, Dr. A H M Aktaruzzaman, Dr. A B M Kamrul Hasan, Dr. Debashis Kumar Ghosh

### 3) Scientific committee

- a. **Convenor**– Dr. Faria Afsana
- b. **Member secretary** – Dr. Nazmul Kabir Qureshi
- c. **Members** – President & General Secretary, Prof. Laique Ahmed Khan, Prof. S M Ashrafuzzaman, Dr. M A Samad, Dr. Ahsanul Huque Amin, Dr. Shahjada Selim, Dr. M Saifuddin, Dr. Ahmed Salam Mir, Dr. Taniah Haq, Dr. Abdul Hannan (tareq)

### 4) International affair committee

- a. **Convenor** – Prof. Md Faruque Pathan
- b. **Member secretary** – Dr. Kazi Ali Hasan
- c. **Co-ordinator** – Dr. Shahjada Selim
- d. **Members** – General Secretary, Prof. SM Ashrafuzzaman, Dr. Faria Afsana, Dr. M Saifuddin

### 5) Committee for Publication & BES Journal

- a. **Convenor** – Prof. Md Hafizur Rahman
- b. **Member secretary** – Dr. Ahmed Salam Mir
- c. **Members** – Prof. Md Faruque Pathan, Prof. Abu Sayeed, Dr. Shahjada Selim, Dr. Tanjina Hossain, Dr. Nazmul Kabir Qureshi, Dr. A B M Kamrul Hasan

### 6) Finance Committee

- a. **Convenor** – Dr. M A Samad
- b. **Member secretary** – Dr. Faria Afsana
- c. **Members** – President & General Secretary, Prof. Md Fariduddin, Dr. C M Delwar Rana, Prof. S M Ashrafuzzaman, Prof. Mir Mosarraf Hossain, Dr. Md Azizul Haque , Dr. Ahsanul Haque Amin, Dr. Sultana Marufa Shefin, Dr. Shahjada Selim, Dr. Samir Kumar Talukder, Dr. A H M Aktaruzzaman

**7) Guideline Dissemination Committee (Respective Guideline subcommittee)**

- a. **Convenor** – Dr. Md. Faruque Pathan
- b. **Member Secretary** – Dr. Shahjada Selim
- c. **Members** –
  - Dr. Tareen Ahmed
  - Dr. Faria Afsana
  - Dr. Nazmul Kabir Qureshi
  - Dr. Ahmed Salam Mir
  - Dr. Md. Fariduddin
  - Dr. Md. Hafizur Rahman

**8) 2nd BES-Mayo Advanced Course in Endocrinology-2021 Committee**

- a. **Convenor** – Prof. Md Faruque Pathan,
- b. **Member secretary** – Prof. Md Hafizur Rahman,
- c. **Co-ordinator** – Dr. Shahjada Selim
- d. **Members** – Prof. S M Ashrafuzzaman, Dr. M A Samad, Dr. Faria Afsana, Dr. Nazmul Kabir Qureshi, Dr. M Saifuddin, Dr. Ahmed Salam Mir

**9) Procurement Committee**

- a. **Convenor** – Prof. SM Ashrafuzzaman
- b. **Member Secretary** – Dr. M Saifuddin

## Life Member List of BES

SL	Membership Number	Name
1.	LM 001	Maj Gen (Retd) Prof A R Khan
2.	LM 002	Prof Hajera Mahtab
3.	LM 003	Prof AK Azad Khan
4.	LM 004	Prof Zafar A Latif
5.	LM 005	Prof Md Faruque Pathan
6.	LM 006	Prof M Fariduddin
7.	LM 007	Prof Md Nazrul Islam Siddiqui
8.	LM 008	Prof Liaquat Ali
9.	LM 009	Prof Tofail Ahmed
10.	LM 010	Prof S M Ashrafuzzaman
11.	LM 011	Dr Tareen Ahmed
12.	LM 012	Prof T A Chowdhury
13.	LM 013	Prof Faridul Alam
14.	LM 014	Prof Kishwar Azad
15.	LM 015	Prof Laique Ahmed Khan
16.	LM 016	Prof Abdus Saleque Mollah
17.	LM 017	Prof M A Mannan
18.	LM 018	Prof M A Jalil Ansari
19.	LM 019	Prof Dr M A Hasanat
20.	LM 020	Dr Mohammad Feroz Amin
21.	LM 021	Dr Kazi Ali Hassan
22.	LM 022	Dr Tariqul Islam
23.	LM 023	Dr Reaz Hamid Khondker
24.	LM 024	Dr Anisur Rahman
25.	LM 025	Dr ASM Towhidul Alam
26.	LM 026	Dr Md Rafiqul Islam

27.	LM 027	Dr C M Delwar Rana
28.	LM 028	Dr Md Habibur Rhaman
29.	LM 029	Dr Ferdousi Begum
30.	LM 030	Dr Choudhury Md Showkat Osman
31.	LM 031	Dr Md Ashraful Islam
32.	LM 032	Prof Begum Rokeya
33.	LM 033	Prof Dr Fauzia Moslem
34.	LM 034	Prof Hossain Shahid Ferdous
35.	LM 035	Prof Dr Rahelee Zinnat
36.	LM 036	Prof Dr Md Zahid Hassan
37.	LM 037	Dr Soheli Satter
38.	LM 038	Prof Dr Md Fazlur Rahman
39.	LM 039	Dr Md Tayob Ali
40.	LM 040	Dr Chandina Ferdous
41.	LM 041	Dr Sultana Marufa Shefin
42.	LM 042	Prof Mohammad Abu Sayeed
43.	LM 043	Dr Md Shakhawat Hussain
44.	LM 044	Dr Md Sajibul Islam
45.	LM 045	Prof Dr Momtaz Begum
46.	LM 046	Dr Faria Afsana
47.	LM 047	Dr Umme Sadia Mili
48.	LM 048	Dr Fauzia Mohsin
49.	LM 049	Dr Md Shafiqul Islam Fakir Mati
50.	LM 050	Dr Noor E Nazneen
51.	LM 051	Dr. Tanjina Hossain
52.	LM 052	Dr Md Qamrul Hassan
53.	LM 053	Dr Shahjada Selim
54.	LM 054	Dr Md Shahinur Rahman
55.	LM 055	Dr Md Mujibur Rahman

56.	LM 056	Dr Murshed Ahamed Khan
57.	LM 057	Dr Kazi Ashraful Alam
58.	LM 058	Dr Mohammad Abdul Hannan (Tareq)
59.	LM 059	Dr Mohammad Ripon
60.	LM 060	Dr Nusrat Sultana
61.	LM 061	Dr Farhana Aktar
62.	LM 062	Dr Sharmin Jahan
63.	LM 063	Dr Sadiqa Tuqan
64.	LM 064	Dr Md Jahangir Alam
65.	LM 065	Dr Md Shah Emran
66.	LM 066	Dr Marufa Mustari
67.	LM 067	Dr Mohammad Anwar Hossain
68.	LM 068	Dr Jobaida Naznin
69.	LM 069	Dr Md Asaduzzaman
70.	LM 070	Dr Anjuman Ara Akhter
71.	LM 071	Dr Abul Bashar Mohammad Kamrul Hasan
72.	LM 072	Dr Md Abu-jar Gaffar
73.	LM 073	Dr Mohammad Rafiq Uddin
74.	LM 074	Md Firoj Hossain
75.	LM 075	Dr Ahsanul Haq Amin
76.	LM 076	Dr Md Mohi Uddin
77.	LM 077	Dr S M Mohiuddin
78.	LM 078	Dr Mohammed Jalaluddin
79.	LM 079	Dr Faizun Nesa
80.	LM 080	Dr Umma Salma
81.	LM 081	Mr ABM Lutfur Rasid Rana
82.	LM 082	Dr Kaniz Hasnin
83.	LM 083	Dr Md Altaf Hossain
84.	LM 084	Dr Parvin Akter Khanam

85.	LM 085	Dr Mohammad Anwar Hossain
86.	LM 086	Dr Azmiri Zaman
87.	LM 087	Dr Mosharrof Hossain
88.	LM 088	Dr Md Zakiur Rahman
89.	LM 089	Dr Nazmul Kabir Qureshi
90.	LM 090	Ms Ummy Salma Munni
91.	LM 091	Dr A H M Aktaruzzaman
92.	LM 092	Dr Md Azizul Hoque
93.	LM 093	Dr Indrajit Prasad
94.	LM 094	Dr Nazma Akter
95.	LM 095	Dr Dulal Chandra Ray
96.	LM 096	Prof Md Hafizur Rahman
97.	LM 097	Dr Abu Nesar Taib
98.	LM 098	Dr S M Showkat Ali
99.	LM 099	Dr Choudhury Meshkat Ahmed
100.	LM 100	Dr Hurjahan Banu
101.	LM 101	Dr Mohammad Atiqur Rahman
102.	LM 102	Dr. Mashfiqul Hasan
103.	LM 103	Dr Debasish Kumar Ghosh
104.	LM 104	Dr Taaniyah Haq
105.	LM 105	Dr Abul Kalam Mohammad Aminul Islam
106.	LM 106	Dr Nazma Akhtar
107.	LM 107	Prof Md Ruhul Amin
108.	LM 108	Dr A T M Zabed Hasan
109.	LM 109	Dr Rokonuzzaman
110.	LM 110	Dr Mahmudul Huque
111.	LM 111	Dr Mohammad Saifuddin
112.	LM 112	Prof Dr Nizamul karim Khan
113.	LM 113	Dr Rushda Sarmin Binte Rouf

114.	LM 114	Dr Mohammed Mahboob Iftekhar
115.	LM 115	Dr Ahmed Salam Mir
116.	LM 116	Dr Mohammad Abul Hasnat Shaheen
117.	LM 117	Dr M A Samad
118.	LM 118	Dr Pratik Dewan
119.	LM 119	Dr Syeda Rezina Sultana
120.	LM 120	Dr Fouzia Anar
121.	LM 121	Dr Nasrin Ahmed
122.	LM 122	Dr Saila Mazed
123.	LM 123	Dr Nagma Hareem Afriecq
124.	LM 124	Dr Muhammad Abdur Rahim
125.	LM 125	Dr Rozana Rouf
126.	LM 126	Dr Sultana Rehana Akhter
127.	LM 127	Dr Salma Ahmad
128.	LM 128	Farjana Rahman Bhuiyan
129.	LM 129	Dr Shahanaz Chowdhury
130.	LM 130	Dr Habibur Rahman
131.	LM 131	Dr Mir Mosarraf Hossain
132.	LM 132	Dr Akhtar Banu Minu
133.	LM-133	Dr Sayed Abdul Kader
134.	LM-134	Dr Samir Kumar Talukder
135.	LM-135	Dr Swapan Kumar Singha
136.	LM-136	Dr Mohammad Afjal Hossain
137.	LM-137	Dr Mohammad Shahjamal Khan
138.	LM-138	Dr Mirza Sharifuzzaman
139.	LM-139	Dr Ajit Kumar Paul
140.	LM-140	Dr Mohammad Shah Alam
141.	LM-141	Dr Afsar Ahammed Meraz
142.	LM-142	Dr Yasmin Aktar

143.	LM-143	Dr Mostafa Hasan Rajib
144.	LM-144	Dr Tania Sultana
145.	LM-145	Dr Md Abdullah Al Mamun
146.	LM-146	Dr A K M Kamrul Huda
147.	LM-147	Dr Khalifa Mahmud Walid
148.	LM-148	Dr Faria Quadir
149.	LM-149	Dr Md Al Sadi
150.	LM-150	Dr Salim Reza
151.	LM-151	Prof Abdul Mannan Sarker
152.	LM-152	Dr Mohammad Motiur Rahman
153.	LM-153	Dr Md Nurul Absar Khan
154.	LM-154	Dr Md Lutful Kabir
155.	LM-155	Dr Nusrat Zarin
156.	LM-156	Dr Nausher Azimul Huq
157.	LM-157	Dr Bimol Kumar Agarwala
158.	LM-158	Dr Dahlia Sultana
159.	LM-159	Dr Md Atikur Rahman
160.	LM-160	Dr Satyajit Mallick
161.	LM-161	Dr Alamgir Hossan
162.	LM-162	Dr Mohammed Abu Bakar
163.	LM-163	Dr Md Shahed Morshed

## General Member (2018-2019-2020)

SL	Membership Number	Name
1.	GM-001	Dr Moinul Islam
2.	GM-003	Dr Mohammad Fakhrul Alam
3.	GM-005	Dr A H M Shadequl Islam
4.	GM-006	Dr Shahana Parveen
5.	GM-009	Dr Mohammad Jahangir Alam

6.	GM-010	Dr Mobarak Hosen
7.	GM-011	Dr Prashanta Prasun Dey
8.	GM-012	Dr Md Abdul Kader
9.	GM-013	Dr Md Kamrul Azad
10.	GM-014	Dr Mohammad Intiaj Mahbub
11.	GM-015	Dr K M Nahid-Ul-Haque
12.	GM-017	Dr Sharmin Chowdhury
13.	GM-020	Dr Muhammad Abdul Halim Khan
14.	GM-021	Dr Abu Noyim Mohammad
15.	GM-022	Dr Mohd Forhad Alam
16.	GM-023	Dr Shoma Sharker
17.	GM-024	Dr Shaik Shirin Afroz
18.	GM-025	Dr Jannatun Naima Khanam
19.	GM-026	Dr Lala Shourav Das
20.	GM-027	Dr Md Palash Mollah
21.	GM-030	Dr Mohammad Rashedul Hasan
22.	GM-031	Prof Sayed Shahidul Islam
23.	GM-032	Dr Palash Kumar Chanda
24.	GM-034	Dr Afroza Begum
25.	GM-035	Dr Sunjida Islam
26.	GM-036	Dr Begum Moriom Zamila
27.	GM-037	Dr Muhammad Mahabubur Rahaman
28.	GM-038	Dr Muhammad Abdul Hannan
29.	GM-039	Dr Ashim Dhar
30.	GM-041	Dr Shangkar Barua
31.	GM-045	Dr Md Rakibul Hasan
32.	GM-046	Dr Md Ahamedul Kabir
33.	GM-047	Dr (Col) Mohammad Sarwar Khan
34.	GM-048	Dr Khadiza Umma Salma

34.	GM-048	Dr Khadiza Umma Salma
35.	GM-049	Dr Md Anwarul Kabir
36.	GM-050	Dr Ramen Chandra Basak
37.	GM-051	Dr Md Masud Nabi
38.	GM-052	Dr Khorshed Anowar
39.	GM-053	Dr Shafiqul Bashar
40.	GM-054	Dr Omar Faruque
41.	GM-055	Dr Mohammad Nurul Amin
42.	GM-056	Dr Md Humayun Kabir
43.	GM-057	Dr Shahryar Ahmad
44.	GM-058	Dr Mohammad Moin Shahid

### **Associate Member (2018-2019-2020)**

<b>SL</b>	<b>Membership Number</b>	<b>Name</b>
1.	AM-001	Dr Afrah Khan
2.	AM-002	Dr Sharmin Kauser
3.	AM-003	Dr Kazi Nazmul Hossain
4.	AM-004	Dr Israt Rezwana
5.	AM-005	Dr Mita Dutta
6.	AM-006	Dr Mohammad Aminul Islam
7.	AM-007	Dr Azimun Nessa
8.	AM-008	Dr Mostofa Kamal Chowdhury
9.	AM-009	Dr Anaya Saha Banna
10.	AM-010	Dr Shahinoor Siddiqui Runa
11.	AM-011	Dr Mahmud Hasan
12.	AM-012	Dr Samira Mahjabeen Mithila
13.	AM-014	Dr Md Abu Shehab
14.	AM-015	Dr Mohona Zaman
15.	AM-016	Dr Md Imrul Hasan

16.	AM-017	Dr Kashfia Ahmed Keya
17.	AM-018	Dr Tahseen Mahmood
18.	AM-019	Dr Shazia Afrine Eva
19.	AM-020	Dr Ahmed Hossain
20.	AM-021	Dr Hasan Ali Choudhury
21.	AM-022	Dr Syeda Salma Shireen
22.	AM-023	Dr Tania Tofail
23.	AM-024	Dr Indira Roy
24.	AM-025	Dr Mohiaminul Abedin
25.	AM-026	Dr Md Habibul Ghani
26.	AM-027	Dr Choman Abdullah Mohana
27.	AM-028	Dr Md Shayedat Ullah
28.	AM-029	Dr Md Kabir Hossain
29.	AM-030	Dr Jabunnaher Binta Islam
30.	AM-031	Dr Emran Ul Rashid Chowdhury
31.	AM-032	Dr Palash Chandra Sutradhar
32.	AM-033	Dr Susmita Paul
33.	AM-034	Dr Sanjoy Kumar Shil
34.	AM-035	Dr Iffat Ara Jahan
35.	AM-036	Dr Mukul Rayhan
36.	AM-037	Dr Umme Sumyia
37.	AM-038	Dr Shafikul Islam
38.	AM-039	Dr Md Rafiquzzaman
39.	AM-040	Dr Eshita Das
40.	AM-041	Dr Sohel Khan
41.	AM-042	Dr Lipika Sarker
42.	AM-043	Dr Mohammad Faysal Ahmed
43.	AM-044	Dr Rasheda Begum

**Title: Pearls of management of Primary Hyperaldosteronism****André Lacroix<sup>1</sup>**

<sup>1</sup>MD, FCAHS, Professor, Division of Endocrinology, Department of Medicine, Centre de Recherche du Centre hospitalier de l'Université de Montréal (CHUM), Montréal, Québec, Canada

Primary aldosteronism (PA) is responsible for 6-13% of human hypertension and increases cardiovascular and other morbidities rates compared to essential hypertension. It is however possible that its prevalence may be even higher when considering less severe forms previously identified as low renin essential hypertension. In addition to the common indications for screening (resistant hypertension, hypokalemia, adrenal incidentaloma, familial cases), recent guidelines recommend to screen all patients with new sustained hypertension (150/100 mmHg) and those with sleep apnea or atrial fibrillation and hypertension. The most frequent causes of PA include bilateral idiopathic hyperplasia (IHA, 60-70%) and unilateral aldosteronoma (APA, 30-40%). This distinction was recently challenged by the findings of zona glomerulosa nodular hyperplasia adjacent to APA identified by immunohistochemistry for aldosterone synthase expression in resected adrenals; a considerable overlap between each etiology may exist with asymmetric bilateral hyperplasia. Adrenal venous sampling (AVS) is required to identify which patients have sufficiently lateralised source of aldosterone and should undergo unilateral adrenalectomy. Unilateral adrenalectomy can also be useful in patients with asymmetric bilateral hyperplasia but with dominant nodule on one side or in patients who have cortisol and aldosterone co-secretion. Complete clinical and biochemical cure following unilateral adrenalectomy varies greatly depending on various populations and surgical criteria utilized; however a majority of patients are clinically improved and require less antihypertensive medication. Long term medical therapy with adequate amounts of mineralocorticoid antagonists is indicated for patients with symmetric bilateral hyperplasia; recent studies suggest that it is important with this therapy to normalize renin concentrations to prevent cardiovascular complications associated with primary hyperaldosteronism.

**Title: Prevention of renal failure in DM****Iqbal Munir<sup>1</sup>**

<sup>1</sup>MD, Endocrinologist, Moreno Valley, CA, USA

Improved diabetes care has been associated with improved cardiovascular outcomes but renal complications remaining as a significant problem. Analysis of participants in large multinational clinical trials in patients with advanced diabetic nephropathy and proteinuria shows that the risk of end-stage kidney disease was significantly more common than cardiovascular death. Multiple therapies aimed at reducing cardiovascular disease in DM might have sufficiently reduced the rate of macrovascular complications. On the other hand, more patients are progressing to end-stage kidney disease.

A better understanding of renal disease's pathophysiology in diabetes and the development of

newer agents, including GLP-1 agonists and SGL-2 inhibitor, show promising results in slowing renal deterioration and lowering adverse renal outcomes. I will discuss the recent clinical trial data and the emerging roles of these drugs in improving renal outcomes in diabetes.

### **Title: Postoperative management of pituitary tumors**

#### **Prof. Md. Hafizur Rahman<sup>1</sup>**

<sup>1</sup>MBBS, DEM, MD(EM), Former Prof & Head, Dept of Endocrinology, Dhaka Medical College, & General Secretary, Bangladesh Endocrine Society. Email: hafizdrendo@yahoo.com

Pituitary tumors are common and most are treated surgically except prolactinomas. After preoperative evaluation, all patients will receive replacement hormonal therapy for adrenal insufficiency, hypothyroidism or diabetes insipidus (DI) prior to surgery. Initiation of sex steroid and GH replacement therapy is typically deferred until a later point in the postoperative management. For patients with normal preoperative adrenal function, some experts routinely treat empirically with stress dose of GC during and immediately after surgery, but others wait until postoperative evaluation has demonstrated cortisol deficiency to treat. Although transsphenoidal surgery is effective and well tolerated, there are a number of surgical and endocrine complications that need to be monitored and treated. Common endocrine complications are central DI, Syndrome of Inappropriate ADH Secretion (SIADH) and acute adrenal insufficiency. DI can be transient, permanent, or remit and then recur later in a classic triphasic response with DI followed by SIADH followed by DI. Early morning cortisol levels should be measured to assess adrenal insufficiency. For patients with acromegaly, Cushing disease (CD), and prolactinomas, morning serum growth hormone, cortisol and prolactin levels, respectively, should be measured on postoperative day one and two to predict early and long-term remission. All patients should undergo a repeat full evaluation of pituitary function at least 6 weeks after surgery and then at the 12-week postoperative visit to confirm stability of endocrine function. Postoperative MRI is typically performed at the 12-week visit. After primary surgery, CD may be cured, persistent or recurrent. For recurrent and persistent CD, surgical reintervention, medical therapy, radiotherapy or bilateral adrenalectomy have to be taken into account. For persistence of acromegaly, repeated surgery, medical therapy or radiotherapy may be tried.

### **Title: How to chose the appropriate contraceptive?**

#### **Prof. Shaikh Zinnat Ara Nasreen<sup>1</sup>**

<sup>1</sup>Prof. & Head (Obs/Gynae) Department, Z H Sikder Women's Medical College & Hospital

Contraceptive provides control over pregnancy timing and prevention of unintended pregnancy. Optimal use of contraceptives could avert an astounding 30% of maternal deaths particularly septic abortion. 214 million women have an unmet need for contraception (WHO 2018) including Bangladesh.

There are several issues to consider when deciding which method of contraception is right for the women -like age, life style, weight,risks of thromboembolism, personal history of liver disease,

heart diseases, efficacy and side effects of contraceptives and personal preference, psychosocial and cultural belief. Oral contraceptive pill (OCP) is 99% effective. Low dose contraceptive pill consists of 10-20 microgm estrogen has very minimum side effects in comparison to standard OCP and can be used for all healthy young women even women over 44 years, provided they are not smoker, obese and not having heart diseases. Fertility returns very soon after the stopping OCP. To avoid androgenic side effects of OCP, 4th generation of Progestins such as Drospirenone can be chosen which has anti mineralocorticoid activities. However combined Drospirenone pills are more thrombotic than OCP with 2nd generation levonorgestrel. As OCP regularise period, reduces heavy period, dysmenorrhoea, it may be good choice for women with AUB (abnormal uterine bleeding), PCOS, Endometriosis and in PID.

Progesterone only pills are safe in lactating women, it does not alter Blood pressure so it is safe alternative of combined pills. Levonorgestrel intrauterine device, implant and DMPA are long acting reversible contraceptives (LARC) and very effective. Copper IUCD is effective for 10 years and can be used in immediate postpartum and where estrogen is contraindicated. Women who have family complete, LARC are right options but as fertility return is delayed so new couple should avoid it. Barrier method in addition to contraception prevents sexually transmitted infection and HIV. But method failure and lack of motivation reduces it's efficacy. Permanent methods like vasectomy and tubal ligation are not popular in our country, but during 3rd caesarean section routine ligation must be offered. Proper counselling is key to choose the appropriate contraceptive where the clinicians need to address any knowledge deficit, misconception or exaggerated concern about the safety of contraceptive methods. It remains a critical aspect in empowering women to make informed choices and shared decision.

### **Title: Hyperprolactinemia -Case based approach**

**Dr. Faria Afsana<sup>1</sup>**

<sup>1</sup>Assistant Professor, Department of Endocrinology, BIRDEM General Hospital

Hyperprolactinemia, defined by a high level of serum prolactin above range, is the most common hypothalamus-pituitary dysfunction. In nonpregnant and nonlactating women, the clinical picture mimics the puerperal period, characterized by irregular menses or amenorrhea, galactorrhea, infertility, and a decrease of libido. In men, hypogonadism, infertility, and decreased libido remains the complaint. There are Physiological, pathological, or pharmacological causes of hyperprolactinemia. Physiological hyperprolactinemia is transient and adaptive; whereas, pathological and pharmacological hyperprolactinemia are symptomatic and has unwanted long-term consequences. Patients with hyperprolactinemia may remain asymptomatic or can present with signs and symptoms of hypogonadism and galactorrhea. If serum prolactin is found elevated, the next step is to determine the cause by exclusion of physiological causes as pregnancy, pharmacological causes as drugs like domperidone, antipsychotics and pathological as hypothyroidism, renal and hepatic failure, intercostal nerve stimulation by trauma or surgery, prolactinomas, other tumors in the hypothalamus-pituitary region. An extensive history and physical examination are important to exclude causes of hyperprolactinemia and inquire about

signs and symptoms of hyperprolactinemia. Identifying the correct cause is important to establish the correct treatment. If all these causes are ruled out and pituitary imaging found normal, idiopathic hyperprolactinemia will be the diagnosis. In symptomatic patients, treatment with dopaminergic agonists is indicated. In the absence of symptoms, neither pituitary study imaging nor medical treatment is required.

## **Approach To Erectile Dysfunction In Diabetes**

### **Dr. Shahjada Selim<sup>1</sup>**

<sup>1</sup>Associate Professor, Department of Endocrinology, BSMMU, Visiting Professor in Endocrinology, Texila American University, USA, Executive Committee Member, ISSM

Until recently, erectile dysfunction (ED) was one of the most neglected complications of diabetes. In the past, physicians and patients were led to believe that declining sexual function was an inevitable consequence of advancing age or was brought on by emotional problems. This misconception, combined with men's natural reluctance to discuss their sexual problems and physicians' inexperience and unease with sexual issues, resulted in failure to directly address this problem with the majority of patients experiencing it. Luckily, awareness of ED as a significant and common complication of diabetes has increased in recent years, mainly because of increasing knowledge of male sexual function and the rapidly expanding armamentarium of novel treatments being developed for impotence. Studies of ED suggest that its prevalence in men with diabetes ranges from 35–75% versus 26% in general population. The onset of ED also occurs 10–15 years earlier in men with diabetes than it does in sex-matched counterparts without diabetes. A sexually competent male must have a series of events occur and multiple mechanisms intact for normal erectile function. He must 1) have desire for his sexual partner (libido), 2) be able to divert blood from the iliac artery into the corpora cavernosae to achieve penile tumescence and rigidity (erection) adequate for penetration, 3) discharge sperm and prostatic/seminal fluid through his urethra (ejaculation), and 4) experience a sense of pleasure (orgasm). A man is considered to have ED if he cannot achieve or sustain an erection of sufficient rigidity for sexual intercourse. Most men, at one time or another during their life, experience periodic or isolated sexual failures. However, the term "impotent" is reserved for those men who experience erectile failure during attempted intercourse more than 75% of the time. For better outcome in ED with DM optimal diabetes control, patient counselling and oral PDE5i constitute the 1st line of medical therapy.

## **Title: Graves' ophthalmopathy**

### **Dr. Tanjina Hossain<sup>1</sup>**

<sup>1</sup>Associate Professor, Department of Endocrinology, Green Life Medical College

Graves' Ophthalmopathy is an inflammatory eye disease that develops in the orbit in association with autoimmune thyroid disorders. In majority (90%) cases, it is seen with current or past Graves' disease. Approximately a third of patients with Graves' disease have some sign or symptoms of Graves' ophthalmopathy, while only 5% have moderate to severe disease. The autoimmune

process, production of antibodies against self-antigens such as TSH receptor (TSHR) and IGF-1 receptor (IGF-1R), inflammatory infiltration, and accumulation of glycosaminoglycans (GAG) lead to edematous-infiltrative changes in periocular tissues. As a consequence, edema exophthalmos develops. The gradation of disease severity is mild, moderate to severe and sight threatening. Both the activity and severity of disease should be considered in therapeutic decisions regarding treatment of ophthalmopathy. The evaluation and management of Graves` Ophthalmopathy should be done in multidisciplinary approach combining Endocrinologists and Ophthalmologists and other expertise in other specialties like radiation therapy, plastic surgery, ENT and Endocrine surgery. However, a deeper understanding of the pathophysiology of the disease and their involvement of immunological processes may give rise to the introduction of new, effective, and safe methods of treatment or monitoring of the disease activity.

### **Title: Ketogenic Diet for Diabetes : Dream or Curse**

**Dr. M Saifuddin<sup>1</sup>**

<sup>1</sup>FCPS (Medicine), MD (Endocrinology), FRCP (Ireland), FACE (USA), FACP (USA), Assistant Professor (Endocrinology), Dhaka Medical College

Ketogenic diet seem like the latest weight-loss craze, but it's actually been around for nearly a century. Developed in 1920s, this ultra-low-carb, high-fat diet was originally used to treat seizures in people with epilepsy but grab attention and popular among young generation and Diabetic patients for rapid weight reduction and hope to get numerous health benefits against Diabetes, Cancer, certain neurological disorders including Alzheimer's disease. Diabetic patients are following the diet as some persons claiming that reversal to non Diabetic state and controlling Diabetes without any medication is also possible with this diet. Ketogenic diet involves drastically reducing carbohydrate intake and replacing it with fat aiming to force body into metabolizing fat instead of carbohydrates. Burning fat seems like ideal way to lose weight and reduce appetite. The classic Ketogenic diet is not a balanced diet and has numerous risks. Ketogenic diet is high in saturated fat with link to atherosclerosis and heart disease. There is risk of Diabetic ketoacidosis due to discontinuation of Anti Diabetic medication or patients on SGLT2 inhibitor. Other potential risks include nutrient deficiency, deterioration of existing liver disease, renal problems due to protein overload and increased risk of osteoporosis. Available research on the Ketogenic diet for weight loss is still limited with small number of participants for limited period and without control groups. So long term outcome of Ketogenic diet is uncertain as very low carb diet is difficult to sustain with numerous risk and possibility of weight gain after give up of Ketogenic diet.

### **Title: State of the art lipid management**

**Dr. Ahmed Salam Mir<sup>1</sup>**

<sup>1</sup>Associate Professor (CC), Department of Endocrinology, BIHS Hospital

Lipid management is a key component of both prevention and treatment of atherosclerotic cardiovascular diseases (ASCVD). The Framingham study in 1961 first identified serum

cholesterol as a risk factor for coronary heart disease. Further studies established that elevated level of low-density lipoprotein (LDL) cholesterol is an important risk factor for ASCVD. Current guidelines focus on maintaining optimum level of LDL cholesterol in persons with high ASCVD risk. For the last few decades, statins were the mainstay of lipid management, along with other drug groups including fibrates, ezetimibe and omega 3 fatty acids. Pro-protein convertase subtilisin/Kexin type 9 (PCSK9) inhibitors has opened a new horizon in the management of dyslipidemia. Whatever may be the treatment modality, it is imperative to make a personalized treatment plan for each individual patient with shared decision making and emphasizing lifestyle modification.

### **BESCON 20-ABS-1001**

**TITLE: Clinical, biochemical, metabolic outcome of Ramadan fasting in patients with type 2 diabetes mellitus: a real-world, multi-center, prospective observational study.**

**Dr. Nazmul Kabir Qureshi**

Consultant (Endocrinology & Medicine), National Healthcare Network.

**BACKGROUND:** It is obligatory on all healthy Muslim adults to fast during Ramadan. Patients who are prone to develop hypoglycemia and hyperglycemia, many still insist on performing Ramadan fasting. It is estimated that 50 million people with diabetes fast each year<sup>2</sup> and majority of them lives in Asia-Pacific, Middle East, North Africa region and rest in Europe, North and South America.

**OBJECTIVE:** The study was conducted to understand clinical, biochemical, metabolic outcome of Ramadan fasting and to explore effects of pre-Ramadan education in type 2 diabetic patients who observed Ramadan fast.

**METHODS:** A real-world, multi-center, prospective, observational study was conducted at the diabetes OPD of National Healthcare Network (NHN) Uttara, Dhaka, Bangladesh and OPD of MARKS Hormone and Diabetes clinic, MARKS Medical College & Hospital in Dhaka, Bangladesh. Randomly selected type 2 diabetic patients were recruited 1 to 12 weeks prior to the Ramadan and followed up till 12 weeks post-Ramadan. A total of 271 participants completed satisfactory follow up. Doses of gliclazide, glimepiride, metformin and insulin were adjusted. Data was collected using a set of questionnaires in a face to face interview.

**RESULT:** The majority (80.1%) of participants received pre-Ramadan education and adjustment of medication. Significant reduction of body weight, body mass index (BMI) and blood pressure were reported after Ramadan fast ( $p < 0.001$ ). None of the studied participants experienced severe hyper/hypoglycemia or acute complications requiring hospitalization or an emergency room visit. Metformin was the commonest prescribed anti-diabetic medication during pre [232(85.60%)] to post [234 (86.30%)] Ramadan follow-up. Premixed insulin was the commonest insulin during study period [Pre- vs. Post-Ramadan: 69 (25.50%) vs. 64 (23.60%)]. Mean of fasting and prandial

capillary blood glucose decreased from pre-Ramadan period to post-Ramadan period ( $P < 0.05$ ). HbA1c decreased during post-Ramadan period compared to pre-Ramadan visit ( $P = 0.13$ ). A significant reduction in the triglyceride level was observed during post-Ramadan follow up ( $P < 0.05$ ).

**CONCLUSION:** The study revealed that a safe fasting can be observed with proper pre-Ramadan work-up. Ramadan fasting resulted into significant reduction of bodyweight, BMI, blood pressure, lipid profile and improved glycemic status in patients with type 2 diabetes.

## BESCON 20-ABS-1002

**TITLE: Frequency of Extended Spectrum Beta-Lactamases (ESBL) Infections Among Diabetic and Non-Diabetic Adult Patients, Common Isolates and its Association with Glycemic Status.**

**Dr. Nazmul Kabir Qureshi**

Consultant (Endocrinology & Medicine), National Healthcare Network.

**BACKGROUND:** ESBL infection is frequent among both diabetic and non-diabetic adult subjects. Poor glycemic status worsen infections.

**OBJECTIVE:** Aim of this study was to find out frequency and pattern of ESBL infections among subjects with or without diabetes and to determine whether ESBL infection was more frequent among diabetic subjects and whether glycemic status was associated with ESBL infection pattern.

**METHODS:** This cross-section observational study was conducted among adult patient attending in United Hospital Limited, Dhaka, Bangladesh during 2016.

**RESULT:** A total of 99 subjects (male=34, female=65) were studied. Among them, 61 [male=26.2%, female=73.8%] were diabetic and rest [n=38, male=47.3%, female=52.7%] were non-diabetic [p .03]. Female had higher A1c% than male [7.82±2.23 vs 6.84±1.59, p .025]. Diabetic subjects had higher age [69.29±12.21 vs 61.71±20.60 years], A1c% [8.70±1.73 vs 5.51±.39], TC of WBC [14.55±5.25 vs 12.47±4.96 per cmm], Platelet count [262.82±81.41 vs 218.79±112.96 per 10x3/L] and ESR [49.60±16.35 vs 39.84±14.24 mmHg 1st h] than non-diabetic subjects. Among diabetic subjects, bacteria were more frequently isolated from urine sample (49.2%) followed by blood sample (18%), sputum (16.4%) and among non-diabetic, those were equally isolated from urine and blood sample (28.9% both) followed by sputum sample (18.4%). Both in diabetic and non-diabetic subjects, E coli was the most frequent bacteria [54.1% and 44.7% respectively p .72]. Other common isolates were K. pneumoni, pseudomonas, serratia etc. ESBL infection was more frequent among diabetic than non-diabetic subjects [36.1% vs 13.16% respectively, p .01]. FPG [11.04±5.13 vs 7.77±3.06 mmol/L, p.001], 2h PPG [14.15±6.68 vs 10.53±3.65 mmol/L, p .001], and A1c% [8.36±2.40 vs 7.15±1.85, p .009] were higher in subjects with ESBL infection and those with non-ESBL infections.

**CONCLUSION:** Female had higher A1c% than male. Diabetic subjects were more aged. Both in

diabetic and non-diabetic subjects, E coli was the most frequent bacteria. ESBL infection was more frequent among diabetic than non-diabetic subjects. A1c% were higher in subjects with ESBL infection than those with non-ESBL infections.

### **BESCON 20-ABS-1003**

#### **TITLE: Characteristics of Coronavirus Disease 2019 in Hospitalized Patients with Pre-existing Diabetes Mellitus- Lessons learnt from Bangladesh.**

**Dr. Md. Shahed Morshed**

Emergency medical officer, Kurmitola General Hospital, Cantonment, Dhaka.

**BACKGROUND:** Diabetes mellitus (DM) is one of the established risk factors for coronavirus disease 2019 (COVID-19) progression and fatal outcome. However, data on these patients are scarce in literature, especially from a South Asian perspective.

**OBJECTIVE:** This study is aimed to illustrate the clinical and laboratory characteristics of COVID-19 in patients with pre-existing DM from a South Asian setting, Bangladesh. In addition, this study explored the outcome (survived/ deceased) of these patients including the need for intensive care unit (ICU) support.

**METHODS:** This retrospective observational study was conducted in Kunitola general hospital, Dhaka during the month of June 2020 among hospitalized RT-PCR confirmed COVID-19 patients with pre-existing DM. Data on clinical findings, laboratory parameters, treatment and outcomes of the patients were collected from hospital medical records using a structured questionnaire. Pre-existing DM was defined by patients' history of DM and intake of antidiabetic drugs. Logistic regression was used to find out the associations with ICU requirement and final outcomes. The IRB of Biomedical Research Foundation (BRF), Bangladesh approved the study protocol.

**RESULT:** A total of 921 COVID-19 patients admitted during the study period. Among them around 25% (231) had pre-existing DM. Nearly one third (31%, 72) of all DM patients required ICU. While the overall mortality of hospitalized patients with COVID-19 was only 2.8% (58/921), mortality rate (11.3%, 26) was four times higher among patients with pre-existing DM. Notably, nearly 45% (26/58) of all deceased patients had DM. Several clinical (age >60 years, ischemic heart disease) and biochemical variables (leukocytosis, high neutrophils-lymphocytes ratio and high blood glucose at presentation, high ferritin & positive D-dimer) were associated with increased risk of ICU requirement and in-hospital death among hospitalized COVID-19 patients with DM.

**CONCLUSION:** This study showed the impact of COVID-19 infection among patients with pre-existing DM which underscores the need of early detection and meticulous treatment in this group of patients.

## **BESCON 20-ABS-1004**

### **TITLE: Prevalence And Associated Factors Of Depression Among Patients With Diabetes: A Cross-sectional Study In A Tertiary Care Hospital**

**Dr. Nazma Akter**

Assistant Professor (Endocrinology & Metabolism), MARKS Medical College & Hospital, Dhaka, Bangladesh.

**BACKGROUND:** Patients with diabetes mellitus (DM) have a poorer quality of life when compared with patients without DM. In fact, one in every five diabetic patients suffers from co-morbid depression, which can lead to poor management, poor compliance with treatment, and low quality of life.

**OBJECTIVE:** This study aimed to estimate the prevalence of depression and to identify its associated factors influencing depression among patients with type 2 diabetes.

**METHODS:** A cross-sectional study was conducted among 318 diabetic patients attending a diabetic clinic in a tertiary care hospital in Dhaka, Bangladesh. Depression was assessed among the subjects using Patient Health Questionnaire-9 (PHQ-9); a standardized questionnaire developed in the United States of America. Demographic, clinical, and diabetes-related information were collected using a semi-structured questionnaire.

**RESULT:** The prevalence of depression among DM patients was 64.2% (male vs. female: 17.9% vs. 46.2%). According to PHQ-9 tool, 35.5% of patients showed no depression (male vs. female: 9.7% vs. 25.8 %), 30.8% had mild depression (male vs. female: 11.0 % vs. 19.8 %), 18.9% had moderate depression (male vs. female: 5.0 % vs. 13.8%), some (11.6%) had moderately severe depression (male vs. female: 1.6% vs. 10.1 %), and only a few (3.1%) had severe depression (male vs. female: 0.6 % vs. 2.5 %); [p=0.12]. Several socio-demographic factors were found to be positively associated with depression including increasing age, rural residence, low education, unemployment or retired, and the status of being unmarried or widow; [p<0.05]. The longer duration of diabetes (>10 years), presence of diabetic complications and other chronic diseases such as hypertension, dyslipidemia, etc. also were found to be associated with depression; [p<0.001].

**CONCLUSION:** Depression was found to be particularly high among the study population. Since depression could significantly hinder patient's adherence to treatment, there is an urgent need for early diagnosis and treatment. This calls for the integration of mental health care into the management of diabetes.

## **BESCON 20-ABS-1005**

### **TITLE: Preoperative Low Cortisol And Thyroxine In Pituitary Macroadenoma: Does Tumor Size Matter?**

**Mashfiqul-Hasan\*, Atiqur-Rahman M, Chowdhury S, Jobaida-Naznin**

\*Assistant Professor of Endocrinology, National Institute of Neurosciences & Hospital, Dhaka.

**BACKGROUND:** Anterior pituitary dysfunction is one of the commonest mass-effect related features of pituitary macroadenoma and it is imperative to evaluate adrenocortical and thyroid status before surgery to initiate appropriate hormonal replacement.

**OBJECTIVE:** To observe the correlation of basal cortisol and thyroxine with maximal tumor diameter in pituitary macroadenoma patients excluding those with autonomous secretion of ACTH or TSH.

**METHODS:** In this cross-sectional study, 56 patients [median age 33.5, IQR 26.5-40.0 years; 33 (59%) female] with pituitary tumor [Non-functional 30 (53.6%), functional 26 (46.4%)] awaiting surgery at the department of neurosurgery, National Institute of Neurosciences and Hospital, Dhaka were included purposively from July 2018 to October 2020. Clinical information was obtained through direct history and examination. Laboratory and imaging records were evaluated for anterior pituitary hormonal axes and characteristics of tumor. Preoperative morning serum cortisol  $<5 \mu\text{g/dL}$  with low/normal ACTH was taken as evidence of secondary hypoadrenalism and low FT4 with low/normal TSH as secondary hypothyroidism.

**RESULT:** Among the participants, secondary hypoadrenalism was present in 20 (35.7%) and secondary hypothyroidism in 8 (14.3%) participants. Preoperative thyroxine level had significant negative correlation with maximal tumor diameter ( $r=-0.366$ ,  $p=0.006$ ) with every 1 cm increase in diameter increases 1.9 (CI 1.03-3.59,  $p=0.040$ ) fold risk of secondary hypothyroidism. On the other hand, basal cortisol had no significant correlation with maximal tumor diameter ( $r=-0.030$ ,  $p=0.824$ ), neither there was increased risk of secondary hypoadrenalism with increase of tumor size (OR 0.91; 95% CI 0.60-1.38;  $p=0.650$ ). The median tumor diameter of participants with hypoadrenalism was 3.0 cm (range 1.0-6.3 cm) and with hypothyroxinemia was 4.5 cm (range 2.6-5.9 cm).

**CONCLUSION:** Although tumor size is well correlated with thyroxine, there is no significant correlation of it with basal cortisol in patients with pituitary macroadenoma.

**BESCON20-ABS-1006****TITLE: Patterns Of Thyroid Dysfunction In Metabolic Syndrome Patients And Its Relationship With Components Of Metabolic Syndrome****Dr. Nazma Akter**

Assistant Professor (Endocrinology & Metabolism), MARKS Medical College & Hospital, Dhaka, Bangladesh.

**BACKGROUND:** Metabolic syndrome (MetS) consists of a constellation of metabolic abnormalities which include central obesity, hyperglycemia plus insulin resistance, high

triglycerides plus low HDL cholesterol and hypertension. A growing body of evidence suggests that metabolic syndrome is associated with endocrine disorders including thyroid dysfunction. Thyroid dysfunction in metabolic syndrome patients may further add to cardiovascular disease risk thereby increasing mortality.

**OBJECTIVE:** This study was done to assess thyroid function in metabolic syndrome patients and evaluate its relationship with the components of metabolic syndrome.

**METHODS:** A cross sectional study was carried out among 346 metabolic syndrome patients at a Hormone & Diabetes clinic in a tertiary care hospital, Dhaka, Bangladesh. Anthropometric measurements (height, weight, waist circumference) and blood pressure were taken. Fasting blood samples were analysed to measure glucose, triglyceride (TG), high density lipoprotein (HDL) cholesterol and thyroid hormones [Thyroid stimulating hormone (TSH) and Free Thyroxine (FT4)]. Patients were said to be euthyroid if all thyroid hormone levels fell within reference range. Subclinical hypothyroidism (SCH) was considered if TSH >5.0 mIU/L and free T4 is within normal reference value (0.71-1.85 ng/dL). Overt hypothyroidism was defined as TSH > 5.0 mIU/L and free T4 < 0.71 ng/dL.

**RESULT:** Thyroid dysfunction was seen in 46.8 % (n = 162) metabolic syndrome patients. Subclinical hypothyroidism (34.1 %) was the major thyroid dysfunction followed by overt hypothyroidism (12.7 %). Thyroid dysfunction was much common in females (37.0%) than males (9.9%) but not statistically significant; [p = 0.21]. Triglyceride showed significant positive correlation with TSH level (r = 0.169, p = 0.002) and negative correlation with free T4 (r = -0.150, p = 0.005).

**CONCLUSION:** Thyroid dysfunction, particularly subclinical hypothyroidism is common among metabolic syndrome patients, and is associated with one component of metabolic syndrome (triglycerides). Further study is needed to evaluate the mechanism of this correlation.

**List of Participants**  
**Bangladesh Endocrine Society**  
**3rd International Endocrine Conference 2020**

Prof. Dr. Md. Fazlur Rahman	Prof. Dr. AKM Musa
Prof. Dr. Md. Tito Miah	Prof. Md. Roushon Ali
Prof. Dr. Laique Ahmed Khan	Prof. Md. Ruhul Amin
Prof. Dr. M A Hasanat	Prof. Dr. Ferdus Ur Rahman
Prof. Dr. Md. Fariduddin	Prof. Dr. Md. Shahjamal khan
Prof. Dr. Md. Faruque Pathan	Prof. Dr. SK.Zinnat Ara Nasreen
Prof. Dr. Md. Hafizur Rahman	Prof. Nizamul karim Khan
Prof. Dr. Mir Mosarrof Hossain	Assit. Prof. Dr. Nasri Akter Rumi
Prof. Dr. Rowshan Ara Begum	Assit. Prof. Dr. Salah uddin Ahmed
Prof. Dr. S M Ashrafuzzaman	Asst. Prof. Dr. S M Mohiuddin
Prof. Begum Rokeya	Dr. A B M Musa
Prof. Dr. Fauzia Moslem	Dr. A F M Kamal
Prof. Dr. Hasina Afroz	Dr. A N M Shofi Uddin
Prof. Dr. Md. Nurul Gani	Dr. A R Rahman
Prof. Dr. Meshkat Ahmed	Dr. A. K. M Tainur Rahman
Prof. Dr. Nazlima Nagis	Dr. Abdul Mannan Sarker
Prof. dr. Nazma Haque	Dr. Abu Naways
Prof. Dr. Rahelee Zinnat	Dr. Abu Taher
Prof. Dr. Roksana Ivy	Dr. Abul
Prof. Dr. Satta Ranjon Sutrador	Dr. Adnan Nahyan

Dr. Afia Zainab Tanni	Dr. Ahmed Salam Mir
Dr. Afsana Sultana	Dr Ahsanul Hauqe Amin
Dr. Afsar Ahammed	Dr. Alamgir Hossan
Dr. AHM Arifun Nahar	Dr. Amarnath
Dr. Ahmed Ifrad Bin Raunak	Dr. Atm Zabed Hasan
Dr. Aminul Islam	Dr. Bina Rani Dey
Dr. Amrit Rizal	Dr. C M Delwar Rana
Dr. Anoy Hawlader	Dr. Debasish Kumar Ghosh
Dr. Anwar Hossain	Dr. Faria Afsana
Dr. Anwar Hossain	Dr. Fatema Tuz Zohra
Dr. Aparajita Das Keya	Dr. Hasan Mahmud
Dr. Ashraf Uddin Ahmed	Dr. Kazi Ali Hasan
Dr. Ashraful Islam	Dr. M A Hannan
Dr. Ayeshi Shafique	Dr. M A Samad
Dr. Bhupati K. Roy	Dr. M Saifuddin
Dr. Brig. Gen. (Retd) Dr. Iffat Ara	Dr. Mania Parvin
Dr. Chandina Ferdous	Dr. Marufa Mustari
Dr. Choman Abdullah Mohana	Dr. Md. Azizul Haque
Dr. Debashish Bhowmik	Dr. Md. Habibur Rhaman
Dr. A B M Kamrul Hasan	Dr. Md. Kamrul Azad
Dr. A H M Aktaruzzaman `	Dr. Md. Saiful Arif
Dr. Abdul Hannan (Tareq)	Dr. Md. Shah Emran

Dr. Md. Shamim Bhuiyan	Dr. A.K. Kundu
Dr. Milton barua	Dr. Abdul Bari Robel
Dr. Mohammed Kamruzzaman	Dr. Abdullah Al Ratan
Dr. Mohammed Nurul Absar khan	Dr. Abdullah- Al-karim
Dr. Nazmul Kabir Qureshi	Dr. Abjana Hossain
Dr. Rashedul Hasan	Dr. Abu Nesar Taib
Dr. Samir Kumar Talukder	Dr. Abu Selim
Dr. Sayed Ahammed	Dr. Ahad-Al-Kabir
Dr. Shahjada Selim	Dr. Ahmed Hossain
Dr. Shahryar Ahmad Milan	Dr. Ahsanul Huq
Dr. Shangkar Barua	Dr. Ajit Kumar Paul
Dr. Sourav Sarkar	Dr. AKM Kamrul Huda
Dr. Sultana Marufa Shefin	Dr. AKM Qaisarul Islam
Dr. Tahniyah Haq	Dr. Alim Ul Azim
Dr. Tamzid Istiak	Dr. Alpona Adhikary
Dr. Tanjina Hossain	Dr. Amal Chandra Singha
Dr. Umme Sadia Mili	Dr. Aminul Islam
Dr. Mohammed Rasel Khan	Dr. Amreen Sadika Khan
Dr. Md. Mazharul Huq Tanim	Dr. Anaya Saha Banna
Dr. A K Atikuzzaman	Dr. Anjana Saha
Dr. A M Wadud Al Hasan	Dr. Arifa Akter Zahan Shoma
Dr. A. Latif	Dr. Ariful Islam

Dr. Ashim Dhar	Dr. Fariha Alam
Dr. Ashutosh Deb Sharma	Dr. Farjana Rahman
Dr. Asif Mahmud	Dr. Faryal Mustary
Dr. Asif Rayhan	Dr. Farzan Najnin Ripa
Dr. Asif Shahriar	Dr. Farzana Sharmin
Dr. ASM Rakibul Islam Akash	Dr. Fatema Mahbuba Akter
Dr. Atiqur Nur	Dr. Fatima Rokhsana
Dr. Ayesha Akhand	Dr. FMA Zahid
Dr. Aziza Azhar Nasrin	Dr. Foysal Al Sams Malik
Dr. Barnita Chowdhury	Dr. Habibur Rahman
Dr. Bilash Ranjan Das	Dr. Hasib Mahmud
Dr. Biswajit Roy Chowdhury	Dr. Hasnat Al Matin
Dr. Chowdhury Amir Mohammad Faroque	Dr. Helal Ahmed
Dr. Dahlia Sultana	Dr. Hitler Biswas
Dr. Debashis Majumder	Dr. Hosne Ara Akther
Dr. Debnath Bhowmik	Dr. Hosneara Begum
Dr. Dilruba Alam	Dr. Hossain Mohammad Rezwatul Karim
Dr. Ehsan Ahmed	Dr. Humayun Kabir
Dr. Ershad Mondal	Dr. Indira Roy
Dr. Fahmida Bayes Kakon	Dr. Indrajit Prasad
Dr. Farhana Afrooz	Dr. Isfat Jahan
Dr. Farhana Rahman	Dr. Israt Zerin Eva

Dr. Jadev kumer Sarkar	Dr. Mana Banik
Dr. Jamal Uddin	Dr. Maqsudur Rwhman
Dr. Janyanti Rani dhar	Dr. Marium Zaman
Dr. Jobaida Naznin	Dr. Maruf Bin Habib
Dr. Joysree Saha	Dr. Mashfiqul Hasan
Dr. Jubaidul Islam	Dr. Masud Un Nabi
Dr. K. M Istiak Rohan	Dr. Md Faruq Hossain
Dr. Kamrul Islam	Dr. Md. Abdur Rakib
Dr. Kh. Abu Shaquib	Dr. Md. Abu Naim
Dr. Khaled Emtiaz Ahmed	Dr. Md. Abu Shehab
Dr. Khandaker Shehneela Tasmin	Dr. Md. Adnan Hasan
Dr. Khorshed Anowar	Dr. Md. Ahasanul Haque
Dr. Lala Shourav Das	Dr. Md. Alimur Reza
Dr. Lutfa Hoque	Dr. Md. Amimul Ehsan
Dr. M M Akhtaruzzaman	Dr. Md. Amiruzzaman
Dr. M. M. Mortaez Amin	Dr. Md. Ashraful Alam
Dr. Mahbubul Alam	Dr. Md. Ashraful Islam
Dr. Mahmood Abedin Khan	Dr. Md. Enamul Haq
Dr. Mahmud Rashed Mubin	Dr. Md. Eunus Ali
Dr. Mahmudul Haque Bhuiyan	Dr. Md. Firoj Hossain
Dr. Mahmudul Hasan	Dr. Md. Jahangir Alam
Dr. Maisa Mahazabin Prome	Dr. Md. Kabir Hossain

Dr. Md. Mahbub Hassan	Dr. Mita Dutta
Dr. Md. Mainul Ahsan Shamim	Dr. Mizanour Rahman
Dr. Md. Masudur Rahman	Dr. Mizanur Rahman Rony
Dr. Md. Mobasser Billah	Dr. Mobarak Hosen
Dr. Md. Monjurul Huq	Dr. Mofizul Islam
Dr. Md. Nazim Al Azad	Dr. Mohaiminul Atik
Dr. Md. Nazmul Hassain	Dr. Mohammad Abul Hasnat Shaheen
Dr. Md. Palash Molla	Dr. Mohammad Faysal Ahmed
Dr. Md. Rafiquzzaman	Dr. Mohammad Habibullah
Dr. Md. Salim Reza	Dr. Mohammad Hasan Iftekhar
Dr. Md. Salman Hossain	Dr. Mohammad Imtiaz Mahbub
Dr. Md. Sazzad Murad	Dr. Mohammad Jahangir Alam
Dr. Md. Shahinur Rahman	Dr. Mohammad Mahboob Iftekhar
Dr. Md. Talha Chowdhury	Dr. Mohammad Nazrul Islam
Dr. Md. Zahidur Rahman	Dr. Mohammad Nurul Amin
Dr. Md. Zahidur Rahman	Dr. Mohammad Omar Faruque
Dr. Md. Zahurul Haque	Dr. Mohammad Shah Alam
Dr. Md. Al Sadi	Dr. Mohammed Nazrul Islam
Dr. Mihail Briciu	Dr. Mohona Afroz
Dr. Mir Rabaya Akter	Dr. Mohona Zaman
Dr. Mirza Khairul Kamal	Dr. Moinul Islam
Dr. Mirza Sharifuzzaman	Dr. Momena Khatun

Dr. Momtaz Begum	Dr. Noor E Nazneen
Dr. Monira Akhter	Dr. Noshin Tabassum
Dr. Monirul Islam Choyon	Dr. Nur-A-Musabber
Dr. Most. Sharmin Siddika	Dr. Nurul Islam
Dr. Mostafa Hasan Rajib	Dr. Nusrat Zarin
Dr. Mostafizur Rahman	Dr. Nusrat Jarin
Dr. Mostofa Shamim Ahsan	Dr. Palash Kumer Deb
Dr. Motiur Rahman	Dr. Parveen Akter
Dr. Muhaiminul Abedin	Dr. Parvez Ahmed
Dr. Mukul Rayhan	Dr. Pijush Saha
Dr. Munshi Md. Al-Amin	Dr. Pilu Momotaz
Dr. Munzur Alahi	Dr. Popy Sultana
Dr. Nadiya Sultana	Dr. Pronab Chowdhury
Dr. Naimul Haque	Dr. Qamrul Hasan (Badol)
Dr. Nandita Paul	Dr. Rabiul Islam Sujon
Dr. Nargis Rahman	Dr. Rasheda Begum
Dr. Nargis Sultana	Dr. Rawshon Saleha
Dr. Nasrin Parvin Laz	Dr. Reaz Uddin Chowdhury
Dr. Naushen Azimul Huq	Dr. Rezanun Rahman Tanim
Dr. Nazia Sultana	Dr. Rezaul Haider Chowdhury
Dr. Nazmul Islam	Dr. Rezaul Karim Masum
Dr. Nazmul Islam Mahmud	Dr. Rezwana Laboni

Dr. Rokanuzzaman Bhuiyan	Dr. Sclera Shahnewz
Dr. Rowshan Hosne Jahan	Dr. Shabah Fariha
Dr. Rozina Akter	Dr. Shafiul Alam
Dr. Rubayet Islam	Dr. Shahana Parveen
Dr. Rumana Habib	Dr. Shahanaz Begum
Dr. Rummana Siraj	Dr. shahanaz Chowdhury
Dr. Runa Akther Dola	Dr. Shahin Ferdush Shanu
Dr. Rushda Sarmin Binte Rouf	Dr. Shakhera Warda
Dr. S A K M Jahirul Islam	Dr. Shamim Md Afzal
Dr. S M Emran Ali	Dr. Shanta Rahman
Dr. S M Musa kabir	Dr. Shariful Alam Khan
Dr. Sadia Jabeen Mustafa	Dr. Sharmin Jahan
Dr. Saiful Islam	Dr. Sharmin kauser
Dr. Saila Mazed	Dr. Sharmin Siddiqua (Rumky)
Dr. Samiha Haque	Dr. Shayedat Ullah
Dr. Samira Jalil Tanni	Dr. Shazid Hafiz
Dr. Samira Rahat Afroje	Dr. Shibli Nishad Alam
Dr. Sanjida Binte Munir	Dr. Sirajum Monira
Dr. Sanjoy Ranjon Banik	Dr. Sudip Ranjan Dev
Dr. Sathy Rani Sarker	Dr. Sukla Saha
Dr. Sayeidur Rahman	Dr. Sultana Rajia
Dr. Sazia Afrin	Dr. Sumon Rahman Chowdhury

Dr. Sumon Roy	Dr. Wafa Binte Shafiq
Dr. Suporna Singh Mou	Dr. Zannatul Kobra
Dr. Suzauddin Talukdar	Dr. Zarin Tasnim Parisa
Dr. Tabassum Huda	Dr. Tasnina Hossain
Dr. Taheratulkobbra	Dr. Abdul Hamid Mollah
Dr. Tahmina Akter	Dr. Abdullah Al Kafi
Dr. Tajul Islam Munna	Dr. Abdullah Al Noyem
Dr. Tania Afroz	Dr. Abul Kalam Azad
Dr. Tania Sultana	Dr. Ariful Islam
Dr. Tania Tazneen	Dr. Arzu Shamima Rahman
Dr. Tanmoy Saha	Dr. Devendra Nath Sarkar
Dr. Tanveer Ahmed	Dr. Farhana Afroz
Dr. Tanzina Chowdhury	Dr. Faria Tabassum
Dr. Tashrif -Ibn- Aziz	Dr. Fazle Hasan Siddiqi Nayem
Dr. Tauhidul Islam	Dr. Ferdousi Sultana
Dr. Tazin Afroz shah	Dr. Hafiza Nasreen
Dr. Tofayl Uddin	Dr. Juthi Bhowmick
Dr. Tohidul Islam Babu	Dr. Khalid Hasan
Dr. Tushar Kanti Barman	Dr. Khalilur Rahman
Dr. Umme Azad	Dr. Khatune Jannat Asmaul Husna
Dr. Uttom Kumar Dey	Dr. M A Halim Khan
Dr. Vaskar Dhar	Dr. Mahmudul Kabir

Dr. Mamataz Begum	Dr. Sayed Mahbub Alam
Dr. Masuma Akter Chowdhury	Dr. Sayeda Mubina Noor
Dr. Md. Akhtaruzzaman	Dr. Shah Md. Sarwer Jahan
Dr. Md. Alamgir Hossain	Dr. Shahi Farzana Tasmin
Dr. Md. Ataur Rahman	Dr. Sharmin Sultana Shefa
Dr. Md. Faysal Habib	Dr. Some Rose Parvin Rinku
Dr. Md. Lutful Kabir	Dr. Sultana Rehana Akhter
Dr. Md. Mahfuzer Rahman	Dr. Tania Tazneen
Dr. Md. Mizanur Rahman	Dr. Tawhid Ahmed
Dr. Md. Nurul Islam Khan	Dr. Ejaj Bari Chowdhury
Dr. Monowara Begum	Dr. Emran UR Rashid Chowdhury
Dr. Mst. Irine Parvin	Dr. Fahmidul Hannan Rupak
Dr. Nahid Fatema	Dr. Faizun Nesa
Dr. Naznin Akter	Dr. Farhana Sayeed Ananna
Dr. Noor Islam	Dr. Faria Iqbal
Dr. Nusrat Hossain Laz	Dr. Faridul Alam
Dr. Nusrat Sharmin Nipa	Dr. Farzana Akter Popy
Dr. palash kumar chanda	Dr. Farzana Akter Popy
Dr. Probir Mohon Basak	Dr. Fatema Begum
Dr. Saleh Mohammad Ali	Dr. Ferdousi Rahman Bithi
Dr. Salek Masud Mia	Dr. Habibur Rahman
Dr. Salma Ahmad	Dr. Hedayat Ullah

Dr. Iffat Ara Jahan	Dr. Md. Moyeen Uddin Chisty
Dr. Jaminur Rashid	Dr. Md. Muhibullah
Dr. Jebunnahar Binte Islam	Dr. Md. Raiq Raihan Chowdhury
Dr. Jinat Rehana	Dr. Md. Selim Parvez
Dr. Kaiser Alam Chowdhury	Dr. Md. Shafikul Islam
Dr. Kamal Hossain Palok	Dr. Md. Shamim Hossain
Dr. Kaniz Farzana Khanum	Dr. Md. Sohel Rana
Dr. Kaniz Hasnin	Dr. Md. Solaiman Hossain
Dr. Kashfia Rahman Konica	Dr. Md. Ahashan Habib
Dr. KH Mahfuz Ullah	Dr. Md. Amirul Islam Kudrat Ullah
Dr. Khadiza Umma Salma	Dr. Md. Asaduzzaman
Dr. Khaled Hassan	Dr. Md. Aynal Haque
Dr. Khalifa Mahamud Walid	Dr. Md. Azizur Rahim
Dr. Khondoker Shoaib Hossain	Dr. Md. Ebadat Hossain
Dr. KM Nahidul Haque	Dr. Md. Hasan Ali
Dr. Krisna Kamol Saha	Dr. Md. Homayun Kabir
Dr. Lalit Mohan Nath	Dr. Md. Johir Raihan
Dr. Mahbubul Alam	Dr. Md. Kamal Parvej
Dr. Mainul Hossain Chowdhury	Dr. Md. Mamun Khan
Dr. Maliha Tabassum	Dr. Md. Mamun Or Rashid
Dr. Md. Arfin	Dr. Md. Mamun-or Rashid
Dr. Md. Hafizur Rahman	Dr. Md. Maruf Hossain Khan

Dr. Md. Mizanur Rahman	Dr. Mr. A.K.M. Rafique
Dr. Md. Monir Hossain	Dr. Mr. Abdullah Al Shoeb
Dr. Md. Monju Moshwan	Dr. Mr. Abu Hena
Dr. Md. Mozammel Hoq Chowdhury	Dr. Md. Tariquzzaman
Dr. Md. Neaz Pervez	Dr. Mr. Arun Chandra Roy
Dr. Md. Quamruzzaman Mannu	Dr. Mr. Biplob Kumar Sarker
Dr. Md. Rezaul Karim	Dr. Mr. Intaz Uddin
Dr. Md. Rifat Sabbir	Dr. Mr. Kazi Nurul Hoque
Dr. Md. Shahed Morshed	Dr. Mr. M Tamiz Uddin
Dr. Md. Shahidur Rahman	Dr. Mr. Md Al-Amin Mollik
Dr. Md. Tanbir Sajib	Dr. Mr. Md. Asaduzzaman
Dr. Md. Tonmoy Rahaman	Dr. Mr. Md. Ashraful Anowar Sharif
Dr. Md. Yusha Islam	Dr. Mr. Md. Daud Alam
Dr. Mezba UL Gaffar	Dr. Mr. Md. Kabir Hossain
Dr. Misbaha Uddin	Dr. Mr. Md. Taifurul Islam Al Azad
Dr. Mohammad Afjal Hossain	Dr. Mr. Md. Mahiuddin
Dr. Mohammad Aminul Islma	Dr. Mr. Mohammad Tanbir Ashraf Bhuiyan
Dr. Mohammad Atiqur Rahman	Dr. Mr. Muhammad Osman Ghani
Dr. Mohammad Faruk Ahmed	Dr. Mr. Provash Chandra Saha
Dr. Mohammad Mahbubur Rahman	Dr. Mr. Farhad Hossen
Dr. Mohiuddin Andalib	Dr. Muhammad Shah Alam
Dr. Mr. A B M Ashraful Alam	Dr. Narayan Chandra Banik

Dr. Nazma Akhtar	Dr. Saju Barua
Dr. Nazma Akter	Dr. Sanjida Islam
Dr. Nazmul Hasan	Dr. Sanjoy Kumar Shil
Dr. Palak Das	Dr. Satyajit Mallick
Dr. Palash Chandra Sutradhar	Dr. Sheikh Mohammad Adil Uddin
Dr. Prasanta Prasun Dey	Dr. Shek Sady Khan
Dr. Rahat Uzzaman	Dr. Shihan M R Huq
Dr. Ramen Chandra Basak	Dr. Sitesh Kumar
Dr. Ratul Sarker	Dr. Subi Kharel
Dr. Rokeya ferdous	Dr. Susmita Paul
Dr. S.M Hasan Murad	Dr. Taifur Husain
Dr. Sadia Afreen Ananna	Dr. Tofazzal Hossain Bhuiyan
Dr. Sadiqa Tuqan	Dr. Yasmin Aktar

## Be enlisted as proud Member of BES

### Membership Guideline

Category	Qualification	Fee	Validity
Life Member	Endocrinologists bearing degree of MD (EM)/DEM/FCPS (Endocrinology)/ M Phil (Clinical Endocrinology) under recognized university of Bangladesh and recognized by BMDC	10,000	Lifetime
General Member		1,000	2 Calendar Years
Associate Member	<p>Post graduate in any specialties, working in the field of endocrinology.</p> <p>Associate membership will require proof of active participation in the field of endocrinology and or research activity with endocrine disorders.</p> <p>Associate member will not be able to hold office and will not have any voting rights. They can participate in all other activities of the society</p>	600	2 Calendar Years

- Must attach copy of Photo, NID, BMDC Reg. Certificate of all Degree, Diploma, Fellowship, Documents for proof (for associate member)
- Submit the completed application form to BES SECRETARIAT



#### BES SECRETARIAT

Room: 706, 6th Floor, Rose View Plaza, 185 Elephant Road,  
(opposite Hatirpool Kacha Bazar), Dhaka-1205, Bangladesh

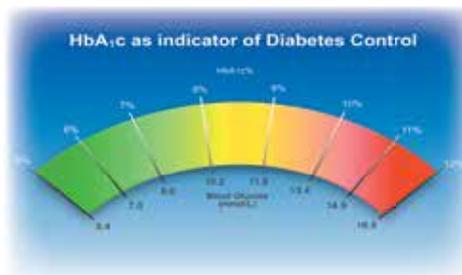
Cell: 01511552012

Email: endobd2012@gmail.com

Website: <http://bes-org.net>



When HbA1c begins to rise in patients with type 2 diabetes . . .



 **Adlina**<sup>®</sup>  
Linagliptin 5mg tablet

A novel DPP-4 inhibitor, significantly reduces HbA1c, an effective treatment option in patients with CKD

 **UniMed UniHealth**  
Pharmaceuticals

Further information is available from UniMed UniHealth Pharmaceuticals Limited, House # 6/9, Block # F, Satmosjid Road, Lalmatia, Dhaka 1207, Bangladesh  
[www.unimedunihealth.com](http://www.unimedunihealth.com)



State-of-the-art manufacturing facility of pharmaceuticals serving quality products since 2006

With the vision to ensure better quality products & patients compliance in Diabetes & Cardiovascular therapeutic classes

**BEACON** Pharmaceuticals Ltd. introduced

**BEACON**  
Chronic Care

**Xelmet**  
Metformin HCl 500 & 850 mg Tab.

**Glipxen**  
Linagliptin 5 mg Tab.

**Sinjard**  
Empagliflozin 10 & 25 mg Tab.

For diabetic patients with high blood glucose when OAD treatment is not enough

**Diasulin**<sup>®</sup>  
Insulin Human (rDNA) USP sterile injection



All in **One Solution**



For rapid control of mealtime glucose

**Acilog**<sup>®</sup>  
Insulin Aspart (rDNA) BP

For rapid control of fasting & mealtime glucose

**Acilog**<sup>®</sup> Mix  
Biphasic Insulin Aspart (rDNA) BP

**Biopen**  
Swiss made



For Painless smart Insulin delivery system, once daily 24h basal insulin support

**Glarine**<sup>®</sup> Biopen  
Insulin Glargine USP  
Swiss made

Right **Basal Insulin** OAD ...with *Improved Adherence*

For uncontrolled hyperglycemic patients

**Aptin**<sup>®</sup> M 50/500 50/850  
Metformin + Metformin tablet



**POWERFUL** HbA1c reducer



In uncontrolled T2DM

**Lino**<sup>™</sup>

Linagliptin INN

**RENAL FRIENDLY GLIPTIN IN THIS ERA**



# Mysulin

Insulin Human (rDNA) USP

*Highly Purified  
Human Insulin is now*

## Emparol

Empagliflozin INN 10mg & 25mg Tablet

Lower risk of Cardiovascular (CV) Death

Lower A1C

**BOTH ONE PILL**



**DRUG INTERNATIONAL LTD.**

# SK+F

ESKAYEF PHARMACEUTICALS LTD.

**Underactive thyroid gland** may destroy the balance of the body required for normal life resulting in multiple consequences.

**A balanced thyroid** is the solution to all these complications and **Levothyroxine** is the **preferred choice** for the treatment of hypothyroidism.

To fulfill the unmet need of dosing convenience of Levothyroxine formulation



Introduces

New

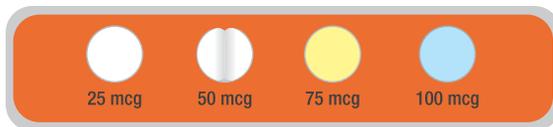
**THYRONOR**<sup>®</sup>

Levothyroxine Sodium USP 25, 50, 75 & 100 mcg



Thyroid therapy for normal life  
More control on individualized dosing

With 4 precise dosing options first time in Bangladesh



1<sup>st</sup>  
Time in  
BANGLADESH



World class products, World class devices



**Humulin<sup>®</sup> 70/30**

70% NPH and 30% Regular Human Insulin (rDNA Origin) Injection **U-100**



**Humulin<sup>®</sup> R**

Human Regular Insulin (rDNA Origin) Injection **U-100**



**Humulin<sup>®</sup> N**

Human NPH Insulin (rDNA Origin) Injection **U-100**



HumaPen<sup>®</sup> Ergo II

IABL

For information, please contact:  
**International Agencies (Bd.) Ltd.**  
120, New Ekamra Road, Bhaba Centre (2nd Floor) Dhaka-1000  
Phone: [+880-2] 9331484, 9362422  
Fax: [+880-2] 9331484  
E-mail: info@iabl.com

Lilly



Ziska Pharmaceuticals Ltd.

Introducing

# Oral Anti-diabetic

# Ajardy

Empagliflozin

Controlling glucose  
with cardio protection



**Glytas**  
Gliclazide

**Metforal**  
Metformin

**Glimitus**  
Glimepiride



**Ziska Pharmaceuticals Ltd.**

E-mail : [info@ziskapharma.com](mailto:info@ziskapharma.com), web : [www.ziskapharma.com](http://www.ziskapharma.com)

# Managing only Diabetes **is not enough!**



## Emjard™



Empagliflozin 10 & 25 mg Tablet

Ensures glycemc control along with marked Cardio-protection



Remarkably reduces the risk of CV death



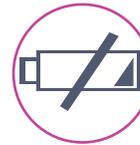
Significantly reduces HbA1c



Helps in reduction of body weight



Ensures reduction of BP



Offers no chance of hypoglycemia

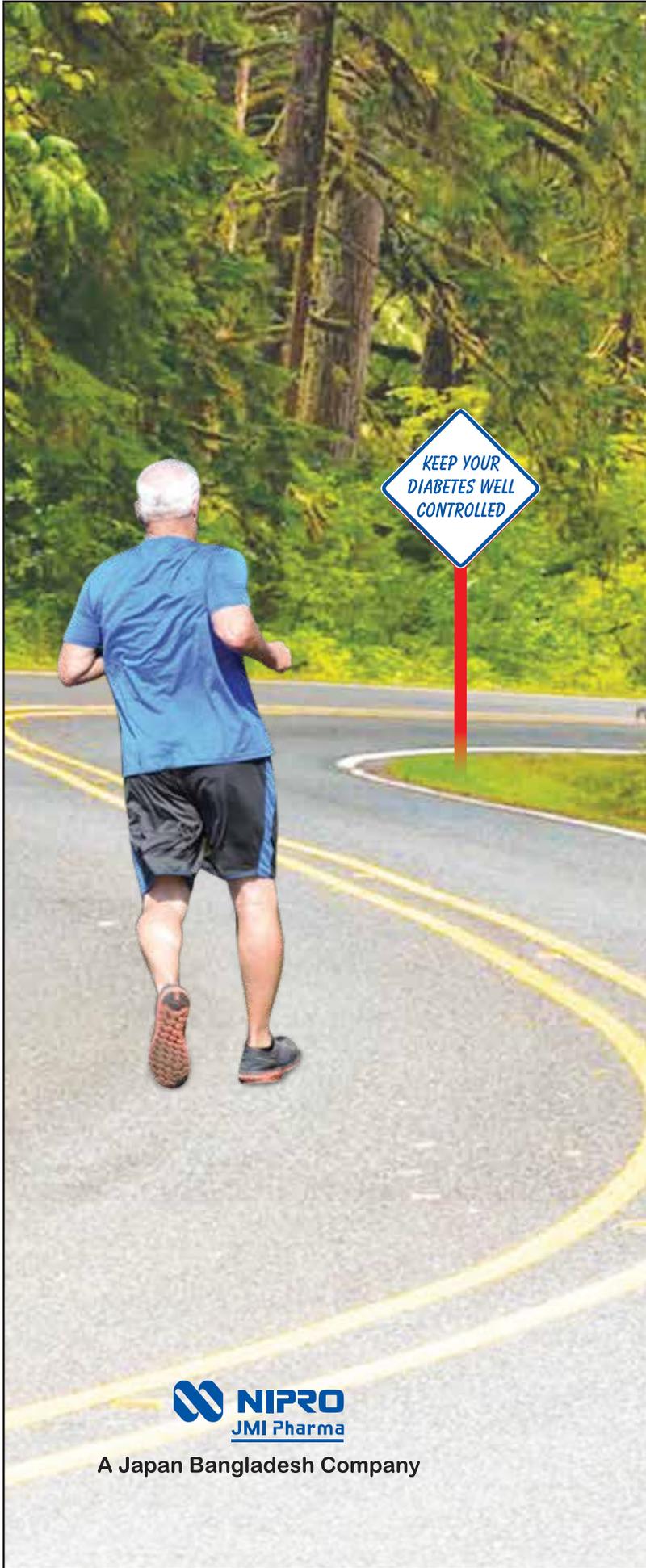
*Since 1958*



**SQUARE**  
PHARMACEUTICALS LTD.  
BANGLADESH

[www.squarepharma.com.bd](http://www.squarepharma.com.bd)





 **NIPRO**  
JMI Pharma

A Japan Bangladesh Company

For better health care  
in diabetes

 **Empa**<sup>TM</sup>  
Empagliflozin

Beyond Diabetes

 **EmpaMet**<sup>TM</sup>  
Empagliflozin + Metformin

Together is better

 **Lijenta 5**<sup>TM</sup>  
Linagliptin

Tomorrow's prevention, today

 **Lijenta-M**<sup>TM</sup>  
Linagliptin + Metformin

For ultimate glycemic control

**For further information:**

Unique Heights, Level-6, 117,  
Kazi Nazrul Islam Avenue, Ramna, Dhaka-1217,  
[www.niprojmi-pharma.com](http://www.niprojmi-pharma.com)

BEKIMCO  
PHARMA

Proudly Introduces

**Clinically Proven High Quality European Insulin**

in collaboration with  **BIOTON** from POLAND

One of the largest insulin manufacturer in the world

For **T1DM** and **T2DM** patients

**GENSULIN<sup>®</sup>**  
Insulin Human

**Powerful. Precise. Clinically Proven**



**GENSULIN<sup>®</sup> N**

**GENSULIN<sup>®</sup> R**

**GENSULIN<sup>®</sup> M30**



The Automated Ergonomic Injection device for  
Type 1 and Type 2 diabetes Patients

**GensuPen<sup>2</sup>**  
AUTOMATIC INJECTOR  
FOR GENSULIN<sup>®</sup> INSULIN

**Delivering with Confidence & Comfort**



# MAKE YOUR MISSION POSSIBLE

Effective blood glucose control with lowest risk of hypoglycemia<sup>1,2</sup>

Long term protection from renal and cardiovascular complications<sup>1</sup>

## DIAMICRON® MR60

Gliclazide EP 60 mg modified release tablet

### YOUR TRUSTED PARTNER

**ADD**

Patients uncontrolled on metformin<sup>3</sup>

**INITIATE**

Patients contraindicated to metformin<sup>3</sup>

**COMPOSITION:** Diamicron® 60 mg, modified release tablet containing 60 mg of gliclazide, contains lactose as an excipient. **INDICATION:** Non insulin-dependent diabetes (type 2) in adults when dietary measures, physical exercise and weight loss alone are not sufficient to control blood glucose. **DOSAGE AND ADMINISTRATION:** One half to 2 tablets per day i.e. from 30 to 120 mg taken orally as a single intake at breakfast time, including in elderly patients and those with mild to moderate renal insufficiency with careful patient monitoring. One tablet of Diamicron® MR 60 mg is equivalent to 2 tablets of Diamicron® MR 30 mg. The breakability of Diamicron® MR 60 mg enables flexibility of dosing to be achieved. In patients at risk of hypoglycemia, daily starting dose of 30 mg is recommended. Combination with other antidiabetics: Diamicron® MR 60 mg can be given in combination with biguanides, alpha glucosidase inhibitors or insulin (under close medical supervision). **CONTRAINDICATIONS:** Hypersensitivity to gliclazide or to any of the excipients, other sulfonylurea or sulphonamides; type 1 diabetes; diabetic pre-coma and coma, diabetic keto acidosis; severe renal or hepatic insufficiency (in these cases the use of insulin is recommended); treatment with miconazole (see interactions section); lactation (see fertility, pregnancy and lactation section). **WARNINGS:** Hypoglycemia may occur with all sulfonylurea drugs, in cases of accidental overdose, when caloric or glucose intake is deficient, following prolonged or strenuous exercise and in patients with severe hepatic or renal impairment. Hospitalization and glucose administration for several days may be necessary. Patient should be informed of the importance of following dietary advice, of taking regular exercise and of regular monitoring of blood glucose levels. To be prescribed only in patients with regular food intake. Use with caution in patients with G6PD-deficiency. Excipients: contains lactose. **INTERACTION(S)** Risk of hypoglycemia - contraindicated: miconazole; not recommended: phenylbutazone; alcohol; use with caution: other antidiabetic agents, beta-blockers, fluconazole, ACE inhibitors (captopril, enalapril), H2-receptor antagonists, MAOIS, sulfonamides, clarithromycin, NSAIDs. Risk of hyperglycaemia - not recommended: danazol; use with caution: chlorpromazine at high doses; glucocorticoids; ritodrine; salbutamol; terbutaline, Saint John's Wort (hypericum perforatum) preparations. Risk of dysglycaemia - use with caution: fluoroquinolones. Potentiation of anticoagulant therapy (e.g. warfarin), adjustment of the anticoagulant may be necessary. **PREGNANCY:** Change to insulin before a pregnancy is attempted, or as soon as pregnancy is discovered **BREASTFEEDING:** contraindicated. **DRIVE & USE MACHINES:** Possible symptoms of hypoglycemia to be taken into account especially at the beginning of the treatment. **UNDESIRABLE EFFECTS:** Hypoglycemia, abdominal pain, nausea, vomiting, dyspepsia, diarrhea, constipation. Rare: changes in haematology generally reversible (anaemia, leucopenia, thrombocytopenia, granulocytopenia). Raised hepatic enzymes levels (AST, ALT, alkaline phosphatase), hepatitis (isolated reports). If cholestatic jaundice: discontinuation of treatment. Transient visual disturbances at start of treatment. More rarely: rash, pruritus, urticaria, angioedema, erythema, maculopapular rashes, bullous reactions such as Stevens-Johnson syndrome and toxic epidermal necrolysis, and exceptionally, drug rash with eosinophilia and systemic symptoms (DRESS). As for other sulfonylureas: observed cases of erythrocytopenia, agranulocytosis, haemolytic anaemia, pancytopenia, allergic vasculitis, hyponatremia, elevated liver enzymes, impairment of liver function (cholestasis, jaundice) and hepatitis which led to life-threatening liver failure in isolated cases. **OVERDOSE:** Possible severe hypoglycemia requiring urgent IV glucose, immediate hospitalization and monitoring. **PROPERTIES:** Diamicron® MR 60 mg is a sulfonylurea reducing blood glucose levels by stimulating insulin secretion from beta cells in the islets of Langerhans, thereby restoring the first peak of insulin secretion and increasing the second phase of insulin secretion in response to a meal or intake of glucose. Independent haemovascular properties. **PRESENTATION:** Box of 30 tablets of Diamicron® MR 60 mg in blister. Correspondent: **LES LABORATOIRES SERVIER**, 50 rue Carnot, 92284 Suresnes cedex France. [www.servier.com](http://www.servier.com)



Manufactured by Advanced Chemical Industries Limited under trademark licence from Les Laboratoires Servier- France.

Up to 2 tablets  
at breakfast



1. N Engl J Med. 2008; 358:2560-2572 2. Curr Med Res Opin 2012; 28:1-8  
3. <https://www.who.int/diabetes/publications/guidelines-diabetes-medicines/en/>



# Maxsulin<sup>®</sup>

Human Insulin (rDNA)BP

**Maximum quality Insulin  
for maximum glucose control**



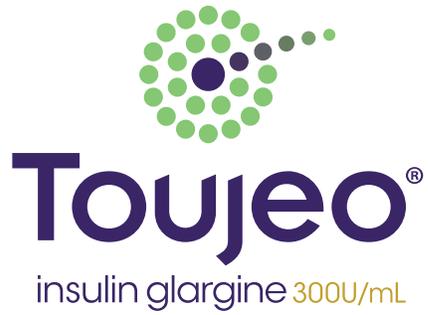
# Linatab<sup>®</sup>

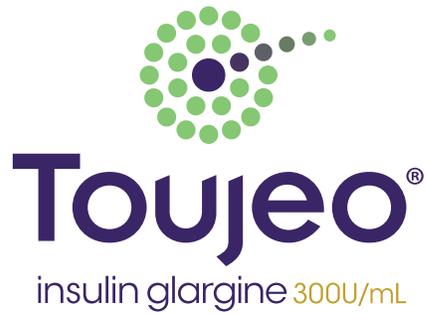
Linagliptin 5 mg



Highly effective and the safest  
DPP-4 inhibitor for T2DM patients  
with impaired hepatic or renal function

 **Incepta Pharmaceuticals Ltd**





## Charting New Paths with Insulin Co-formulation IDegAsp: The Body of Evidence and Clinical Role

Type 2 diabetes mellitus is a progressive disease characterized by insulin resistance and a gradual decline in  $\beta$ -cell function that eventually necessitates the use of exogenous insulin by many patients. Recent guidelines highlight the need to tailor treatment strategies and/or targets to individual patient characteristics, including age, existing comorbidities and the duration of diabetes. Several landmark studies demonstrate the importance of maintaining tight glycaemic control, to reduce the risk of long-term diabetes-related complications (e.g. UKPDS; DCCT/EDIC). Insulin degludec/insulin aspart (IDegAsp) is a soluble combination of insulin degludec (IDeg), a new ultra-long-acting basal insulin, and the rapid-acting insulin analogue, insulin aspart (IAsp). The formulation of IDegAsp has been designed to maintain their independent pharmacokinetic/pharmacodynamic characteristics which should translate into a sharper separation of the bolus and the basal components compared to currently available preparations.

Two Phase 3 randomized, open label, multicentre, treat-to-target, non-inferiority studies (1 initiation & 1 intensification) of 26 weeks and 38 Weeks duration incorporating a total of 828 Type 2 DM patients (296 Insulin Naïve and 532 Insulin experienced) were conducted to identify the efficacy and safety of Once and Twice daily IDegAsp compared to Basal and Basal Plus & Basal Bolus regimen (BOOST-Japan Study by Onishi et al. and Step by Step Trial by Philis-Tsimikas et al.).

Mean HbA<sub>1c</sub> reduction was superior with once daily IDegAsp compared to IGlax (estimated treatment difference, ETD; IDegAsp-IGlax: -0.28% points [-0.46; -0.10] 95% CI,  $p < 0.01$ ) as per Onishi et al. and non-inferiority was confirmed against IGlax U100 + IAsp (estimated treatment difference: 0.07% (95% confidence interval [CI]: -0.06; 0.21)) as per Philis-Tsimikas et al.

At the end of both trials, mean fasting plasma glucose (FPG) was similar for IDegAsp and IGlax and across IDegAsp and IGlax U100 + IAsp groups respectively.

IDegAsp was associated with numerically lower rates of overall confirmed (27%) and nocturnal confirmed hypoglycaemia (25%) versus IGlax (estimated rate ratio IDegAsp/IGlax: 0.73 [0.50; 1.08] 95% CI,  $p = \text{NS}$ , and 0.75 [0.34; 1.64] 95% CI,  $p = \text{NS}$ , respectively) as per Onishi et al. During treatment initiation (Week 0–26) there were significantly fewer nocturnal confirmed symptomatic episodes per subject associated with IDegAsp (estimated rate ratio [RR] 0.55 [95% CI: 0.34; 0.90]; a 45% rate-reduction versus IGlax U100 + IAsp and the entire treatment period (Weeks 0–38) RR 0.61 [95% CI: 0.40; 0.93]; a 39% rate-reduction versus IGlax U100 + (2/3)IAsp as per Philis-Tsimikas et al.

Mean daily insulin doses were similar between groups at end-of-trial in BOOST-Japan Study. On the other hand, in Step by Step trial, the total insulin dose was significantly lower with IDegAsp OD versus IGlax U100 OD + IAsp OD at Week 26 (70.9 U versus 79.4 U, respectively [a 10.7% lower dose]; odds ratio (OR) 0.88 U [95% CI: 0.81; 0.95]). By the end of the trial, the dose associated with IDegAsp was significantly lower (6.6%) than that associated with IGlax U100 + IAsp (83.4 U versus 89.3 U, respectively; OR 0.91 U [95% CI: 0.83; 0.99]).

Safety profiles were similar across treatment groups in both of the studies.

In conclusion, IDegAsp OD & BID are effective treatment initiation & intensification options versus basal & multiple injection basal-bolus therapies, achieving superior or similar glycaemic control, with numerically & significantly less nocturnal hypoglycaemia with favourable safety profile.

### Reference:

1. Onishi et al. Diabetes Obes Metab 2013;15:826–32
2. Philis-Tsimikas et al, Diabetes Res Clin Pract, 2019. 147:157-165



## Cardiovascular Risk Reduction with Once-weekly Semaglutide in Subjects with Type 2 Diabetes: A Post Hoc Analysis of Gender, Age, and Baseline CV Risk Profile in the SUSTAIN 6 Trial

Cardiovascular disease (CVD) is the leading cause of morbidity and mortality in people with type 2 diabetes (T2D) and diabetes itself confers a substantial independent risk of coronary heart disease, stroke, and death from other vascular causes. Current diabetes guidelines recommend multifactorial CV risk management and the preferential use of a glucagon-like peptide-1 receptor agonist (GLP-1RA) or sodium-glucose cotransporter-2 inhibitor with proven CV benefits as a first-choice add-on to metformin in patients with T2D and established atherosclerotic CVD. Semaglutide is a GLP-1 analogue approved as a once-weekly, subcutaneous treatment for T2D. The phase 3 SUSTAIN (Semaglutide Unabated Sustainability in Treatment of Type 2 Diabetes) clinical trial program evaluated the efficacy and safety of Semaglutide in subjects with T2D in a range of patient populations across the continuum of diabetes care. In the SUSTAIN 6 CV outcomes trial (CVOT), once-weekly Semaglutide (0.5 or 1.0 mg) added to standard of care significantly reduced the occurrence of a first major adverse CV event (MACE: CV death, nonfatal myocardial infarction [MI], or nonfatal stroke) vs placebo over 2 years in 3297 subjects with T2D and high CV risk. Given the increasing emphasis on individualized patient care in the management of T2D, this post hoc analysis assessed the effects of gender, age, and baseline CV risk on the reduction of CV risk in the SUSTAIN 6 trial.

Subjects were grouped according to gender, age (50–65 years and > 65 years), and CV risk profile at baseline (prior myocardial infarction [MI] or stroke vs no prior MI or stroke, and established CV disease [CVD] vs CV risk factors alone, including subjects with chronic kidney disease). Time to MACE and its individual components (CV death, nonfatal MI, nonfatal stroke), hospitalization for unstable angina or heart failure, and revascularization (coronary and peripheral) were analysed for all subgroups. Additional analyses were performed for gender and age to investigate change from baseline in HbA1c and body weight, as well as tolerability.

A total of 3297 subjects were included. The majority of subjects (60.7%) were male; 43% were > 65 years of age; 41.5% had a history of MI or stroke; and 76.8% had established CVD. Compared with placebo, Semaglutide reduced the risk of the first occurrence of MACE and each MACE component consistently across all subgroups (gender, age, and baseline CV risk profile). Revascularizations, HbA1c and body weight were also reduced consistently across all subgroups compared with placebo. Gastrointestinal adverse events in all treatment groups were more common among women than men, but rates of premature treatment discontinuation were similar for both genders.

In this post hoc analysis of the SUSTAIN 6 trial, once-weekly Semaglutide vs placebo reduced the risk of MACE in all subjects regardless of gender, age (50–65 and > 65 years), or baseline CV risk profile (prior MI or stroke vs no prior MI or stroke or established CVD vs CV risk factors alone). In addition, similar reductions in HbA1c and weight were observed with Semaglutide compared with placebo across gender and age groups, and safety profiles were comparable between men and women and in subjects above or below the age of 65 years.

### References :

1. <https://cardiab.biomedcentral.com/articles/10.1186/s12933-019-0871-8#Abs1> ( Cardiovascular Diabetology volume 18, Article number: 73 (2019)
2. American Diabetes Association. Standards of medical care in diabetes 2018. Diabetes Care. 2018;41(Suppl 1): S1–135.
3. Lau J, Bloch P, Schäffer L, Pettersson I, Spetzler J, Kofoed J, et al. Discovery of the once-weekly glucagon-like peptide-1 (GLP-1) analogue semaglutide. J Med Chem. 2015; 58:7370–80.
4. Ozempic marketing authorisation 2018. <https://www.ema.europa.eu/en/medicines/human/EPAR/ozempic>. Accessed 7 May 2019.
5. Marso SP, Bain SC, Consoli A, Eliaschewitz FG, Jódar E, Leiter LA, et al. Semaglutide and cardiovascular outcomes in patients with type 2 diabetes. N Engl J Med. 2016; 375:1834–44.



# World Class Products, World Class Devices

**Humalog<sup>mix</sup>25™**

25% insulin lispro (rDNA origin) injection  
75% insulin lispro protamine suspension



**Humalog<sup>mix</sup>50™**

50% insulin lispro (rDNA origin) injection  
50% insulin lispro protamine suspension



**Humalog®**

insulin lispro (rDNA origin) injection



**abasaglar®**  
insulin glargine injection  
(rDNA origin) 100 units/mL



**HumaPen<sup>ERGO</sup> II**  
The Ergonomic Insulin Delivery Pen



**trulicity®**  
dulaglutide once-weekly injection



**EFFECTIVE SAFE EASY**

Circulated with the prior approval of Licensing Authority (Drugs).

**Lilly** | Eli Lilly and Company, Indianapolis IN46285, USA | Eli Lilly Export S.A. 1214 Vernier Geneva, Switzerland

Marketing and Distribution Partner in Bangladesh  
**Healthcare Pharmaceuticals Limited**  
Nasir Trade Centre (Level-9 & 14), 89 Bir Uttam C.R. Datta Sarak, Dhaka-1205, Tel: (02) 9632176

HPLEL\_PL 2020\_01



*Lilly*

Making life

# BETTER AND BETTER



Introduced the  
**WORLD'S FIRST  
COMMERCIALY  
AVAILABLE INSULIN**  
in 1923

**25 YEARS OF  
ANALOGUE INSULIN**  
for making lives of people  
with diabetes better



**BRINGING  
INNOVATION**  
to the next level

We're looking for the next great  
**BREAKTHROUGH**



**Healthcare Pharmaceuticals Limited**  
Nasir Trade Centre (Level-9 & 14), 89 Bir Uttam C.R, Datta Sarak, Dhaka-1205, Tel: (02) 9632176

HPLEL\_NPM 2020\_71



## **Bangladesh Endocrine Society (BES)**

**Room-706, 6th Floor, Rose View Plaza (Opposite Hatirpool Green Market)**

**185, Elephant Road, Dhaka 1205, Bangladesh**

**Cell: +88-01511552012**

**Email: [endobd2012@gmail.com](mailto:endobd2012@gmail.com)**