**Supplementary Materials**

**Online Searches for SGLT-2 inhibitors and GLP-1 receptor agonists correlate with prescription rates in the United States: An Infodemiological Study**

Omar Dzaye MD MPH PhD1†, Philipp Berning MD1,2†, Alexander C. Razavi MD MPH PhD1,3, Rishav Adhikari1, Kunal Jha MD1, Khurram Nasir MD MPH MSc4, John W. Ayers MA PhD5, Martin Bødtker Mortensen MD PhD1,6, Michael J. Blaha MD MPH1

1 Johns Hopkins Ciccarone Center for the Prevention of Cardiovascular Disease, Johns Hopkins University School of Medicine, Baltimore, MD, United States

2 Department of Medicine, University Hospital Muenster, Muenster, Germany

3 Emory Center for Heart Disease Prevention, Emory University School of Medicine, Atlanta, GA, United States

4 Division of Cardiovascular Prevention and Wellness, Department of Cardiology, Houston Methodist DeBakey Heart & Vascular Center, Houston, TX, United States

5 Division of Infectious Diseases and Global Public Health, University of California, San Diego, CA, United States

6 Department of Cardiology, Aarhus University Hospital, Aarhus, Denmark

† These authors share first authorship

**Supplementary Figure Legends**

**Supplemental Figure 1. ARIMA analysis for prescriptions of selected SGLT2i and GLP-1 RA.**

Trends in actual and expected prescription rates (per 10 million prescriptions) from January 2016 to December 2021 for dapagliflozin, empagliflozin, ertugliflozin, dulaglutide, semaglutide. Cut-off date for ARIMA analysis was January 01, 2021. Actual (dark blue) and expected (light blue) trends are shown.

**Supplemental Figure 2. Trends in prescriptions and online searches for Biguanide (metformin) and Sulfonylureas between 2016 and 2021 for the United States.**

(A) Online searches and (B) prescriptions from 2016 to 2021 for Biguanide (metformin) (red line) and Sulfonylureas (blue line) as monthly query fraction/prescriptions per 10 million searches/prescriptions for summarized brands names are shown. All data are representative for the United Sates.

**Supplemental Figure 1. ARIMA analysis for prescriptions of selected SGLT2i and GLP-1 RA.**

 ****

**Supplemental Figure 2. Trends in prescriptions and online searches for Biguanide (metformin) and Sulfonylureas between 2016 and 2021 for the United States.**

****

**Supplemental Table 1. Queried brand names and online search terms.**

|  |  |  |
| --- | --- | --- |
| **Drug name** | **Prescription Data** | **Online Search Terms** |
| *SGLT-2 inhibitors* |  |  |
| Dapagliflozin |  | Dapagliflozin |
|  | FARXIGA | FARXIGA |
|  | QTERN | QTERN |
|  | XIGDUO XR | XIGDUO XR |
| Canagliflozin |  | Canagliflozin |
|  | INVOKAMET | INVOKAMET |
|  | INVOKANA | INVOKANA |
| Empagliflozin |  | Empagliflozin |
|  | JARDIANCE | JARDIANCE |
|  | SYNJARDY | SYNJARDY |
|  | GLYXAMBI | GLYXAMBI |
|  | TRIJARDY | TRIJARDY |
| Ertugliflozin |  | Ertugliflozin |
|  | SEGLUROMET | SEGLUROMET |
|  | STEGLATRO | STEGLATRO |
|  | STEGLUJAN | STEGLUJAN |
| *GLP-1 receptor agonists* |  |  |
| Albiglutide |  | Albiglutide |
|  | TANZEUM | TANZEUM |
| Dulaglutide |  | Dulaglutide |
|  | TRULICITY | TRULICITY |
| Liraglutide |  | Liraglutide |
|  | VICTOZA | VICTOZA |
|  | SAXENDA | SAXENDA |
| Exenatide |  | Exenatide |
|  | BYDUREON | BYDUREON |
|  | BYETTA | BYETTA |
| Semaglutide |  | Semaglutide |
|  | OZEMPIC | OZEMPIC |
|  | RYBELSUS | RYBELSUS |
|  | WEGOVY | WEGOVY |
| *Biguanide* |  |  |
| Metformin |  |  |
|  | METFORMIN HCL | METFORMIN |
|  | METFORMIN ER (G) |
|  | METFORMIN ER (F) |
|  | GLUMETZA | GLUMETZA |
|  | RIOMET | RIOMET |
|  | GLUCOPHAGE | GLUCOPHAGE |
|  | FORTAMET ER | FORTAMET ER |
| *Sulfonylureas* |  |  |
| Glimepiride |  |  |
|  | GLIMEPIRIDE | GLIMEPIRIDE |
|  | AMARYL | AMARYL |
|  | GLIPIZIDE | GLIPIZIDE |
| Glipizide |  |  |
|  | GLIPIZIDE ER | GLIPIZIDE ER |
|  | GLIPIZIDE XL | GLIPIZIDE XL |
|  | GLUCOTROL XL | GLUCOTROL XL |
| Glyburide |  |  |
|  | GLUCOTROL | GLUCOTROL |
|  | GLYBURIDE  | GLYBURIDE  |
|  | GLYBURIDE MICRO | GLYBURIDE MICRO |
|  | GLYNASE PRESTAB | GLYNASE PRESTAB |