

**Supplementary Table 2a.** ICD-10 and CPT codes used to define study outcomes and covariates.

| Variable                                          | Code(s)                                                                                                    |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>A. Diabetic Retinopathy Diagnoses (ICD-10)</b> |                                                                                                            |
| Non-proliferative diabetic retinopathy (NPDR)     | E10.32x, E11.32x, E13.32x (mild); E10.33x, E11.33x, E13.33x (moderate); E10.34x, E11.34x, E13.34x (severe) |
| Proliferative diabetic retinopathy (PDR)          | E10.35x, E11.35x, E13.35x                                                                                  |
| Diabetic macular edema (DME)                      | E10.311-E10.319<br>E11.311-E11.319<br>E13.311-E13.319                                                      |
| Unspecified / other diabetic retinopathy          | E10.30-E10.39<br>E11.30-E11.39<br>E13.30-E13.39                                                            |
| Type 2 diabetes mellitus (T2DM)                   | E11.xx                                                                                                     |
| <b>B. Ophthalmic Comorbidities (ICD-10)</b>       |                                                                                                            |
| Diabetic macular edema (DME)                      | E10.311-E10.319, E11.311-E11.319, E13.311-E13.319                                                          |
| Retinal detachment                                | H33.001-H33.8                                                                                              |
| Neovascular glaucoma                              | H40.631-H40.639                                                                                            |
| Epiretinal membrane (ERM)                         | H35.371-H35.379                                                                                            |
| Ischaemic maculopathy                             | H35.321-H35.329                                                                                            |
| Retinal vein occlusion                            | H34.811-H34.819<br>H34.821-H34.839                                                                         |
| Retinal artery occlusion                          | H34.10-H34.139<br>H34.20-H34.239                                                                           |
| Wet (exudative) age-related macular degeneration  | H35.321-H35.329                                                                                            |
| <b>C. Systemic Comorbidities (ICD-10)</b>         |                                                                                                            |
| Coronary artery disease                           | I25.10-I25.119                                                                                             |
| Hypertension                                      | I10                                                                                                        |
| Hyperlipidaemia                                   | E78.00-E78.5                                                                                               |
| Chronic kidney disease                            | N18.1-N18.6                                                                                                |
| <b>D. Procedural Outcomes (CPT)</b>               |                                                                                                            |
| Panretinal photocoagulation (PRP)                 | 67228                                                                                                      |
| Pars plana vitrectomy (PPV)                       | 67036, 67039, 67040, 67041, 67042, 67043, 67108, 67113                                                     |

**Supplementary Table 2b.** Rxnorm codes used to define exposure and covariates.

| <b>E. GLP-1 Receptor Agonist Exposure (RxNorm Ingredient CUI)</b> |           |
|-------------------------------------------------------------------|-----------|
| Semaglutide                                                       | 1991302   |
| Liraglutide                                                       | 475968    |
| Dulaglutide                                                       | 1551291   |
| Exenatide                                                         | 60548     |
| Lixisenatide                                                      | 1440051   |
| Tirzepatide                                                       | 2601723   |
| <b>F. Diabetes Medication Covariates (RxNorm Ingredient CUI)</b>  |           |
| Biguanide                                                         | Metformin |
| Metformin                                                         | 6809      |
| DPP-4 inhibitor                                                   |           |
| Saxagliptin                                                       | 857974    |
| Linagliptin                                                       | 1100699   |
| Sitagliptin                                                       | 593411    |
| Alogliptin                                                        | 1368001   |
| Insulin                                                           |           |
| Insulin, regular, human                                           | 253182    |
| Insulin aspart, human                                             | 51428     |
| Insulin lispro                                                    | 86009     |
| Insulin glulisine, human                                          | 400008    |
| Insulin detemir                                                   | 139825    |
| Insulin degludec                                                  | 1670007   |
| SGLT-2 inhibitor                                                  |           |
| Canagliflozin                                                     | 1373458   |
| Dapagliflozin                                                     | 1488564   |
| Empagliflozin                                                     | 1545653   |
| Ertugliflozin                                                     | 1992672   |
| Bexagliflozin                                                     | 2627044   |
| Sulfonylurea                                                      |           |
| Glipizide                                                         | 4821      |
| Glyburide                                                         | 4815      |
| Chlorpropamide                                                    | 2404      |
| Tolazamide                                                        | 10633     |
| Tolbutamide                                                       | 10635     |
| Glimepiride                                                       | 25789     |
| Thiazolidinedione                                                 |           |
| Pioglitazone                                                      | 33738     |
| Rosiglitazone                                                     | 84108     |

*DPP-4 = Dipeptidyl Peptidase IV, SGLT-2 = Sodium-Glucose Transport 2*