Table S1. The trends on age-standardised prevalence of type 2 diabetes by 139 countries with a population of more than 1 million people and four groups according to the estimated slopes.

| Country                              | Slope* | SE  | P-value | Group† |
|--------------------------------------|--------|-----|---------|--------|
| Afghanistan                          | 61.5   | 11.7| <0.0001 | 2      |
| Albania                              | 29.8   | 27.8| <0.0001 | 1      |
| Algeria                              | 86.6   | 17.3| <0.0001 | 3      |
| Angola                               | 70.7   | 27.0| <0.0001 | 3      |
| Argentina                            | 36.8   | 40.0| <0.0001 | 1      |
| Armenia                              | 52.4   | 6.3 | <0.0001 | 2      |
| Australia                            | -0.3   | -0.1| 0.9050  | 0      |
| Austria                              | 63.2   | 18.8| <0.0001 | 2      |
| Azerbaijan                           | 61.1   | 10.4| <0.0001 | 2      |
| Bangladesh                           | 38.2   | 5.0 | <0.0001 | 1      |
| Belarus                              | -5.0   | -3.6| 0.0016  | 0      |
| Belgium                              | 42.1   | 32.4| <0.0001 | 1      |
| Benin                                | 79.2   | 43.5| <0.0001 | 3      |
| Bolivia (Plurinational State of)     | 31.8   | 13.7| <0.0001 | 1      |
| Bosnia and Herzegovina               | 124.7  | 22.0| <0.0001 | 3      |
| Botswana                             | 100.4  | 34.4| <0.0001 | 3      |
| Brazil                               | -12.7  | -5.7| <0.0001 | 0      |
| Bulgaria                             | 0.6    | 0.1 | 0.8980  | 0      |
| Burkina Faso                         | 45.8   | 26.6| <0.0001 | 2      |
| Cambodia                             | 30.1   | 8.6 | <0.0001 | 1      |
| Cameroon                             | 67.6   | 18.7| <0.0001 | 3      |
| Canada                               | -24.7  | -11.5| <0.0001 | 0      |
| Central African Republic             | 67.1   | 35.6| <0.0001 | 3      |
| Chad                                 | 60.2   | 46.4| <0.0001 | 2      |
| Chile                                | 38.0   | 17.7| <0.0001 | 1      |
| Country              | Value1 | Value2 | p-value   | Rank |
|---------------------|--------|--------|-----------|------|
| China               | 45.6   | 6.2    | <0.0001   | 2    |
| Colombia            | -26.6  | -5.6   | <0.0001   | 0    |
| Congo               | 57.0   | 32.2   | <0.0001   | 2    |
| Cote d'Ivoire       | 10.3   | 10.8   | <0.0001   | 1    |
| Croatia             | 41.9   | 18.9   | <0.0001   | 1    |
| Cuba                | -9.2   | -2.2   | 0.0387    | 0    |
| Cyprus              | -4.9   | -0.6   | 0.5300    | 0    |
| Czech Republic      | 58.0   | 7.9    | <0.0001   | 2    |
| Denmark             | 104.7  | 22.4   | <0.0001   | 3    |
| Dominican Republic  | 49.4   | 21.2   | <0.0001   | 2    |
| Ecuador             | 42.6   | 33.4   | <0.0001   | 2    |
| Egypt               | 114.8  | 38.1   | <0.0001   | 3    |
| El Salvador         | 61.5   | 26.8   | <0.0001   | 2    |
| Estonia             | 43.7   | 7.7    | <0.0001   | 2    |
| Ethiopia            | -36.8  | -86.7  | <0.0001   | 0    |
| Finland             | 82.7   | 38.3   | <0.0001   | 3    |
| France              | 45.5   | 72.1   | <0.0001   | 2    |
| Gabon               | 86.3   | 33.4   | <0.0001   | 3    |
| Georgia             | 111.3  | 48.5   | <0.0001   | 3    |
| Germany             | 32.7   | 10.4   | <0.0001   | 1    |
| Ghana               | 87.7   | 51.3   | <0.0001   | 3    |
| Greece              | 62.6   | 18.3   | <0.0001   | 2    |
| Guatemala           | 120.4  | 20.9   | <0.0001   | 3    |
| Guinea              | 61.3   | 22.8   | <0.0001   | 2    |
| Guinea-Bissau       | 68.7   | 31.5   | <0.0001   | 3    |
| Haiti               | -0.3   | -0.3   | 0.8010    | 0    |
| Honduras            | 36.0   | 19.6   | <0.0001   | 1    |
| Country                                      | X    | Y    | P       | Rank |
|----------------------------------------------|------|------|---------|------|
| Hungary                                      | 32.5 | 9.7  | <0.0001 | 1    |
| India                                        | 50.0 | 10.0 | <0.0001 | 2    |
| Indonesia                                    | 83.7 | 7.6  | <0.0001 | 3    |
| Iran (Islamic Republic of)                   | 92.8 | 14.1 | <0.0001 | 3    |
| Iraq                                         | -11.2| -1.0 | 0.3360  | 0    |
| Ireland                                      | 59.8 | 22.6 | <0.0001 | 2    |
| Israel                                       | 37.9 | 6.0  | <0.0001 | 1    |
| Italy                                        | 26.0 | 7.4  | <0.0001 | 1    |
| Jamaica                                      | 62.8 | 14.0 | <0.0001 | 2    |
| Japan                                        | 0.7  | 0.2  | 0.8810  | 0    |
| Jordan                                       | 60.0 | 21.8 | <0.0001 | 2    |
| Kazakhstan                                   | 2.1  | 1.1  | 0.2820  | 0    |
| Kenya                                        | 45.0 | 30.1 | <0.0001 | 2    |
| Kuwait                                       | 30.2 | 4.1  | 0.0004  | 1    |
| Kyrgyzstan                                   | 0.2  | 0.1  | 0.9070  | 0    |
| Lao People's Democratic Republic             | 79.3 | 38.9 | <0.0001 | 3    |
| Latvia                                       | 52.0 | 20.6 | <0.0001 | 2    |
| Lebanon                                      | 58.5 | 24.8 | <0.0001 | 2    |
| Lesotho                                      | 123.1| 28.8 | <0.0001 | 3    |
| Liberia                                      | 67.5 | 51.9 | <0.0001 | 3    |
| Lithuania                                    | 31.6 | 15.2 | <0.0001 | 1    |
| Madagascar                                   | 37.3 | 57.2 | <0.0001 | 1    |
| Malawi                                       | 37.3 | 18.1 | <0.0001 | 1    |
| Malaysia                                     | 49.1 | 5.3  | <0.0001 | 2    |
| Mali                                         | 51.3 | 154.7| <0.0001 | 2    |
| Mauritania                                   | 64.1 | 104.8| <0.0001 | 3    |
| Mauritius                                    | 272.0| 26.4 | <0.0001 | 3    |
| Mexico                                       | 31.9 | 4.6  | 0.0001  | 1    |
| Country               | Value1 | Value2 | p-value | Rank |
|-----------------------|--------|--------|---------|------|
| Mongolia              | 26.9   | 17.4   | <0.0001 | 1    |
| Morocco               | 89.6   | 84.3   | <0.0001 | 3    |
| Mozambique            | 50.9   | 37.5   | <0.0001 | 2    |
| Myanmar               | 56.2   | 12.6   | <0.0001 | 2    |
| Namibia               | 51.8   | 17.6   | <0.0001 | 2    |
| Nepal                 | 29.1   | 15.5   | <0.0001 | 1    |
| Netherlands           | 52.1   | 29.4   | <0.0001 | 2    |
| New Zealand           | -18.0  | -2.9   | 0.0074  | 0    |
| Nicaragua             | -0.4   | -0.2   | 0.8090  | 0    |
| Niger                 | 49.3   | 46.4   | <0.0001 | 2    |
| Nigeria               | 29.8   | 19.1   | <0.0001 | 1    |
| Norway                | 28.1   | 10.0   | <0.0001 | 1    |
| Oman                  | 104.1  | 23.8   | <0.0001 | 3    |
| Pakistan              | 105.7  | 22.2   | <0.0001 | 3    |
| Panama                | 28.0   | 30.2   | <0.0001 | 1    |
| Paraguay              | 69.6   | 14.0   | <0.0001 | 3    |
| Peru                  | 29.5   | 12.5   | <0.0001 | 1    |
| Philippines           | 137.2  | 33.9   | <0.0001 | 3    |
| Poland                | 33.3   | 13.0   | <0.0001 | 1    |
| Portugal              | 69.7   | 31.4   | <0.0001 | 3    |
| Romania               | 38.1   | 41.1   | <0.0001 | 1    |
| Russian Federation    | 3.1    | 1.5    | 0.1350  | 0    |
| Rwanda                | -7.6   | -3.3   | 0.0028  | 0    |
| Saudi Arabia          | 104.8  | 15.4   | <0.0001 | 3    |
| Senegal               | 74.3   | 44.2   | <0.0001 | 3    |
| Serbia                | 14.3   | 3.9    | 0.0028  | 1    |
| Sierra Leone          | 61.2   | 30.8   | <0.0001 | 2    |
| Slovakia              | 20.1   | 22.0   | <0.0001 | 1    |
| Country                                      | A   | B   |  p-value | Rank |
|----------------------------------------------|-----|-----|----------|------|
| Slovenia                                     | 8.7 | 2.5 | 0.0197   | 1    |
| South Africa                                 | 92.3| 19.0| <0.0001  | 3    |
| Republic of Korea                            | 23.4| 6.5 | <0.0001  | 1    |
| Spain                                        | 22.7| 5.3 | <0.0001  | 1    |
| Sri Lanka                                    | 158.7| 39.1| <0.0001  | 3    |
| Sudan                                        | 63.7| 16.7| <0.0001  | 3    |
| Sweden                                       | 57.8| 145.0| <0.0001 | 2    |
| Switzerland                                  | 34.5| 18.4| <0.0001  | 1    |
| Tajikistan                                   | 63.7| 23.1| <0.0001  | 3    |
| United Republic of Tanzania                  | 44.0| 36.3| <0.0001  | 2    |
| Thailand                                     | 15.2| 2.5 | 0.0174   | 1    |
| Gambia                                       | 61.4| 72.9| <0.0001  | 2    |
| Timor-Leste                                  | 88.6| 14.5| <0.0001  | 3    |
| Togo                                         | 52.7| 62.2| <0.0001  | 2    |
| Trinidad and Tobago                          | 8.8 | 2.3 | 0.0290   | 1    |
| Tunisia                                      | 70.4| 54.6| <0.0001  | 3    |
| Turkey                                       | 22.2| 7.5 | <0.0001  | 1    |
| Turkmenistan                                 | 61.0| 24.4| <0.0001  | 2    |
| Uganda                                       | 33.2| 15.9| <0.0001  | 1    |
| Ukraine                                      | 2.1 | 0.9 | 0.3830   | 0    |
| United Arab Emirates                         | 112.8| 15.9| <0.0001  | 3    |
| United Kingdom of Great Britain and Northern Ireland | 88.4| 35.9| <0.0001  | 3    |
| United States of America                     | 111.9| 13.5| <0.0001  | 3    |
| Uruguay                                      | -11.8| -10.3| <0.0001 | 0    |
| Uzbekistan                                   | 85.5| 20.5| <0.0001  | 3    |
| Venezuela (Bolivarian Republic of)           | 9.2 | 2.3 | 0.0303   | 1    |
| Viet Nam                                     | 60.6| 30.3| <0.0001  | 2    |
| Country             | prevalence | SE          | p-value   | Group |
|---------------------|------------|-------------|-----------|-------|
| Yemen               | 42.5       | 11.3        | <0.0001   | 2     |
| Zambia              | 25.0       | 15.3        | <0.0001   | 1     |
| Zimbabwe            | 129.3      | 29.4        | <0.0001   | 3     |

SE - standard error

* The slopes on age-standardised prevalence of type 2 diabetes were estimated using a general linear model.

† Countries were divided into four groups according to the estimated slope: 0, decrease or no change; 1, slight increase (the lowest tertile at the significant positive slope); 2, moderate increase (the middle tertile at the significant positive slope); and 3, large increase (the highest tertile at the significant positive slope).

Table S2. Number and percentage of countries belonging to each of the four groups according to age-standardised prevalence of type 2 diabetes by GBD Super Regions.

| GBD Super Regions                          | Group*, n (%) |
|--------------------------------------------|---------------|
|                                            | G0  | G1  | G2  | G3  |
| Central Europe, Eastern Europe, and Central Asia | 6 (23.1) | 10 (38.5) | 6 (23.1) | 4 (15.4) |
| High-income                                 | 6 (22.2) | 10 (37.1) | 6 (22.2) | 5 (18.5) |
| Latin America and Caribbean                 | 5 (26.3) | 8 (42.1)  | 4 (21.1) | 2 (10.5) |
| North Africa and Middle East                | 1 (6.2)  | 2 (12.5)  | 4 (25.0) | 9 (56.2) |
| South Asia                                  | 0 (0.0)  | 2 (50.0)  | 1 (25.0) | 1 (25.0) |
| Southeast Asia, East Asia, and Oceania      | 0 (0.0)  | 2 (16.7)  | 4 (33.3) | 6 (50.0) |
| Sub-Saharan Africa                          | 2 (5.7)  | 5 (14.3)  | 14 (40.0)| 14 (40.0)|

GBD - Global Burden of Diseases

*Based on the slopes according to the year from 1990 to 2017 for age-standardised prevalence of type 2 diabetes evaluated using a general linear model; 139 countries were classified as decrease or no change (G0), slight increase (G1), moderate increase (G2) and large increase (G3).