

Table S2. Summary table

| NO | Trial         | year | REF # | Country/Area                           | age | BMI (kg/m <sup>2</sup> ) | follow-up year     | study full follow-up year | Control    |                |                | Intervention |                |                |            |                |                |            |                |                | subject type                  | other (study design, subgroup, special data calculation) |
|----|---------------|------|-------|--|-----|--------------------------|--------------------|---------------------------|------------|----------------|----------------|--------------|----------------|----------------|------------|----------------|----------------|------------|----------------|----------------|-------------------------------|--|
|    |               |      |       |  |     |                          |                    |                           | treat ment | r <sub>c</sub> | n <sub>c</sub> | treat ment   | r <sub>i</sub> | n <sub>i</sub> | treat ment | r <sub>i</sub> | n <sub>j</sub> | treat ment | r <sub>i</sub> | n <sub>j</sub> |                               |  |
| 1  | Pan           | 1997 | 21    | Da Qing, China                         | 45  | 26                       | 6                  |                           | S          | 90             | 133            | D            | 57             | 130            | E          | 58             | 141            | L          | 58             | 126            | IGT                           | cluster RCT  |
| 2  | Fracog        | 1999 | 22    | Australia                              | 39  | 25                       | 4.25 <sup>O2</sup> |                           | S          | 27             | 96             | D            | 26             | 97             |            |                |                |            |                |                | IGT                           |  |
| 3  | Li            | 1999 | 23    | China                                  | 30  | 26                       | 1                  |                           | P          | 6              | 43             | M            | 3              | 42             |            |                |                |            |                |                | IGT                           |  |
| 4  | Heymsfield    | 2000 | 24    | USA&Europe                             | 44  | 36                       | 2                  |                           | P          | 4              | 53             | O            | 2              | 67             |            |                |                |            |                |                | IGT obesity                   | subgroup   |
| 5  | Lindstrom     | 2003 | 25    | Finland, DPS                           | 55  | 31                       | 3 <sup>M</sup>     |                           | S          | 51             | 250            | L            | 22             | 256            |            |                |                |            |                |                | IGT overweight                |  |
| 6  | Oldroyd       | 2006 | 34    | UK                                     | 58  | 30                       | 2                  |                           | S          | 8              | 32             | L            | 7              | 37             |            |                |                |            |                |                | IGT                           |  |
| 7  | Chiasson      | 2002 | 26    | STOP-NIDDM, International multi-center | 55  | 31                       | 3.3 <sup>M</sup>   |                           | P          | 285            | 686            | A            | 221            | 682            |            |                |                |            |                |                | IGT overweight                |  |
| 8  | Knowler       | 2002 | 27    | USA, DPPRG                             | 51  | 34                       | 1                  | 2.8 <sup>M</sup>          | S          | 119            | 1082           | L            | 52             | 1079           | M          | 84             | 1073           |            |                |                | IGT                           | from Fig. 2  |
| 9  | Liao          | 2002 | 28    | USA                                    | 54  | 26                       | 1                  | 2                         | S          | 2              | 32             | L            | 1              | 32             |            |                |                |            |                |                | IGT                           |  |
| 10 | Watanabe      | 2003 | 29    | Japan                                  | 55  | 24                       | 1                  |                           | S          | 6              | 87             | L            | 3              | 86             |            |                |                |            |                |                | IGT                           |  |
| 11 | Tao           | 2004 | 30    | China                                  | 51  | 25                       | 3                  |                           | S          | 13             | 32             | E            | 4              | 28             |            |                |                |            |                |                | IGT                           |  |
| 12 | Fan           | 2005 | 31    | China                                  | 56  | 26                       | 1                  |                           | P          | 3              | 26             | H            | 1              | 25             |            |                |                |            |                |                | IGT                           |  |
| 13 | Torgerson     | 2004 | 32    | Sweden, XENDOS                         | 44  | 37                       | 1                  | 4                         | P          | 28             | 344            | O            | 14             | 350            |            |                |                |            |                |                | IGT subgroup, from Fig.1      |  |
| 14 | Kosaka        | 2005 | 33    | Japan                                  | 52  | 24                       | 4                  |                           | S          | 33             | 356            | L            | 3              | 102            |            |                |                |            |                |                | IGT                           |  |
| 15 | DREAM         | 2006 | 35    | International multi-center             | 55  | 31                       | 3 <sup>O2</sup>    |                           | P          | 489            | 2646           | R            | 449            | 2623           |            |                |                |            |                |                | IGT/IFG 2x2 design            |  |
| 16 | Eriksson      | 2006 | 36    | Finland, Marmo                         | 57  | 28                       | 1.5                |                           | P          | 5              | 17             | G            | 1              | 17             |            |                |                |            |                |                | IGT                           |  |
| 17 | Kamachandra n | 2006 | 37    | India, IDDP                            | 46  | 26                       | 3                  |                           | S          | 73             | 133            | L            | 47             | 120            | M          | 52             | 128            |            |                |                | IGT                           |  |
| 18 | Roumen        | 2008 | 38    | SLIM                                   | 56  | 29                       | 1                  | 3                         | S          | 9              | 47             | L            | 0.5            | 44             |            |                |                |            |                |                | IGT                           |  |
| 19 | Kawahara      | 2008 | 39    | Japan (DES)                            | 51  | 25                       | 3                  |                           | S          | 19             | 142            | L            | 15             | 141            |            |                |                |            |                |                | IGT                           |  |
| 20 | Kawamori      | 2009 | 40    | Japan                                  | 56  | 26                       | 1                  | 3                         | P          | 83             | 881            | A            | 32             | 897            |            |                |                |            |                |                | IGT                           |  |
| 21 | Penn          | 2009 | 41    | UK, EDIPS                              | 57  | 34                       | 1                  | 3 <sup>M</sup>            | S          | 3              | 40             | L            | 3              | 43             |            |                |                |            |                |                | IGT                           |  |
| 22 | Kamachandra n | 2009 | 42    | India, IDDP-2                          | 45  | 26                       | 3                  |                           | P          | 64             | 203            | T            | 61             | 204            |            |                |                |            |                |                | IGT from Fig.2                |  |
| 23 | Yates         | 2009 | 43    | UK                                     | 65  | 29                       | 1                  |                           | S          | 6              | 34             | L            | 2              | 31             | E          | 0              | 33             |            |                |                | IGT overweight                | from Fig.  |
| 24 | Zinman        | 2010 | 44    | Canada                                 | 55  | 32                       | 3.9 <sup>O2</sup>  |                           | P          | 41             | 104            | M            | 14             | 103            |            |                |                |            |                |                | IGT overweight                |  |
| 25 | DeFronzo      | 2011 | 45    | USA                                    | 53  | 34                       | 2.4 <sup>O2</sup>  |                           | P          | 50             | 299            | T            | 15             | 303            |            |                |                |            |                |                | IGT                           |  |
| 26 | Gagnon        | 2011 | 46    | Canada                                 | 57  | 35                       | 1                  |                           | S          | 3              | 26             | L            | 0.5            | 22             |            |                |                |            |                |                | IFG/IGT overweight            |  |
| 27 | Lu            | 2011 | 47    | China                                  | 63  | 27                       | 2                  |                           | S          | 5              | 41             | M            | 0.5            | 46             |            |                |                |            |                |                | IFGorIGT 2x2 design           |  |
| 28 | Lu            | 2011 | 47    | China                                  | 63  | 27                       | 2                  |                           | S          | 3              | 45             | A            | 0.5            | 49             |            |                |                |            |                |                | IGT                           |  |
| 29 | Salas-Salvad6 | 2011 | 48    | Spain , PREDIMED-Reus                  | 67  | 30                       | 1                  | 4 <sup>O2</sup>           | S          | 2              | 134            | D            | 1              | 284            |            |                |                |            |                |                | IGT Intervention= VOO+NUTS    |  |
| 30 | Sakane        | 2011 | 49    | Japan, JDPP                            | 51  | 25                       | 1                  | 3                         | S          | 7              | 131            | L            | 1              | 123            |            |                |                |            |                |                | IGT                           |  |
| 31 | Zhou          | 2011 | 50    | China                                  | 63  | 24                       | 0.5                |                           | S          | 5              | 58             | E            | 0.5            | 58             | D          | 0.5            | 57             | L          | 0.5            | 59             | IGT                           | cluster RCT  |
| 32 | Saito         | 2011 | 51    | Japan, FINT                            | 49  | 27                       | 2.7 <sup>M</sup>   |                           | S          | 41             | 131            | L            | 23             | 131            |            |                |                |            |                |                | IGT/IFC overweight            | subgroup   |
| 33 | Ockene        | 2012 | 52    | Latino, USA                            | 52  | 34                       | 1                  | 2.5                       | S          | 9              | 150            | L            | 9              | 162            |            |                |                |            |                |                | IGT                           |  |
| 34 | Vermunt       | 2012 | 53    | Dutch                                  | 51  | 25                       | 1.5                | 2.5                       | S          | 32             | 386            | L            | 33             | 407            |            |                |                |            |                |                | IGT from percentages          |  |
| 35 | Odawara       | 2013 | 54    | Japan, JPREDIC                         | -   | -                        | 5                  | 5.5                       | L          | 99             | 534            | T            | 91             | 556            |            |                |                |            |                |                | IGT from Cumurative Incidence |  |
| 36 | Wong          | 2013 | 55    | China                                  | 55  | 26                       | 1                  | 2                         | S          | 8              | 50             | L            | 3              | 54             |            |                |                |            |                |                | IGT/IFG                       |  |
| 37 | Xu            | 2012 | 56    | China                                  | 58  | 26                       | 1                  |                           | S          | 7              | 40             | L            | 6              | 41             |            |                |                |            |                |                | IGT                           |  |
| 38 | Fang          | 2014 | 57    | China                                  | 55  | 25                       | 1                  |                           | P          | 33             | 216            | H            | 19             | 223            |            |                |                |            |                |                | IGT                           |  |
| 39 | Lian          | 2014 | 58    | China                                  | 53  | 25                       | 1                  |                           | P          | 56             | 191            | H            | 36             | 198            |            |                |                |            |                |                | IGT                           |  |
| 40 | Weber         | 2016 | 59    | India, DCLIP                           | 44  | 28                       | 1                  | 3                         | S          | 14             | 281            | M            | 5              | 269            |            |                |                |            |                |                | IGT/IFG                       |  |

Total subjects= 20111

10079

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S: standard, P: Placebo, L: lifestyle modification, E: exercise, D: Diet, A: Acarbose/Voglibose, M: Metformin/Flumamine, T(diabetes drugs): Glipizide, Pioglitazon, Rosiglitazone, P: Pitavastatin, O: Orlistat (anti-obesity drug), H: Herbal medicine/ Juangtang bushen recipe/ Tianqi

Q2: Median, M: Mean