**Table S3**. Characteristics of studies included in the systematic review using *ROBINS-I* tool(n=27, R1) [92]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Author [REF] | Year | Country | Subtype of PS-T2DM | Risk of bias judgement*Tool:* ROBINS-I (Table S1) |
| Langer T *et al.* [52] | 2018 | AU, ES,  | DP, M1, IP, BM, CM, GM and T2DM  | Moderate |
| Lemmens-Gruber *et al.* [53] | 2012 | AU | M1, IP, BM, T2DM and HM | Moderate |
| Martins *et al.* [54] | 2015 | BE, BU, CR, DK, SP, HU, IT, NL, UK, SW | DM, HS, M1, M2, IP, BM , CM, GM and WM  | Moderate |
| Petkova *et* al. [56] | 2017 | BU | DP and M1 | Moderate |
| Mestrovic *et al.* [58] | 2012 | CR | DP and M1 | Moderate |
| Haugbole *et al.* [61] | 2009 | DK | M1 | Moderate |
| Horvat *et al.* [63] | 2015 | SL | DP and M1  | Moderate |
| Horvat *et* al. [64] | 2010 | SL | M1 and IP | Low |
| Gmeiner et *al.* [65] | 2017 |  | M1, BM, GM, T2DM and HM | Low |
| Quispe *et al.* [66] | 2011 | SP | M1, M2 and IP | Low |
| Leikola *et* al. [68] | 2012 | FI | M1 and M2 | Low |
| Svensberg *et al.* [69] | 2015 | FI, SW | M2 and IP | Moderate |
| Supper *et* al.[70] | 2018 | FR | M1, BM, CM, GM, WM, T2DM and HM | Low |
| Urbonas *et* al. [71] | 2010 | LT | M1 and IP | Moderate |
| Vella *et* al. [72] | 2009 | MA | DP and IP | Moderate |
| Wirth *at al.* [73] | 2010 | MA |  BM, GM, T2DM and HM | Moderate |
| Geffen *et al.* [74] | 2011 | NL | DP, M1, M2, IP, T2DM and HM | Low |
| Hugtenburg *et al.* [75] | 2009 | NL | HS, M1 and IP | Low |
| Martins *et* al. [76] | 2013 | PT | M1, IP, BM, CM, GM, WM, T2DM and HM | Moderate |
| Nachtigal *et al.* [77] | 2015 | IR, CZ | DM, DP, HS, M1, M2, IP, BM and GM | Low |
| Taylor *et al.* [78] | 2012 | UK | DM, M1, M2, IP, BM, CM, GM, WM and HM | Low |
| Twigg *et al.* [79] | 2013 | UK | DP, M1, M2, IP, NS and T2DM | Moderate |
| Twigg *et al.* [80] | 2013 | UK | DP, HS, M1, M2, NS, BM, GM | Low |
| Morton *et al.* [81] | 2015 | UK | DP, M1, M2, NS, BM, CM, GM and WM | Moderate |
| Twigg *et al.* [83] | 2015 | UK | BM, WM and T2DM | Moderate |
| Andreassen *et* al. [84] | 2016 | UK | HS, M1, M2, IP, NS, BM, CM, GM, WM and T2DM | Moderate |
| Lowrie *at al.* [85] | 2012 | UK | M1, M2, IP, BM, CM, GM and WM | Moderate |
| Ayorinde *et al.* [87] | 2013 | UK | WM and T2DM | Moderate |
| Sandulovici *et al.* [88] | 2018 | RO | DP, M1, IP, BM, CM, GM and WM | Moderate |
| Montgomery *et* al. [89] | 2010 | SW | DP, M1 and IP | Moderate |

*ROBINS-I* Risk Of Bias In Non-Randomized Studies of Interventions; *PS-T2DM* Pharmacy Services for Type 2 *Diabetes Mellitus; AU* Austria, *BE* Belgium, *BU* Bulgaria, *CR* Croatia, *DK* Denmark, *SL* Slovenia, *SP* Spain, *FI* Finland, *FR* France, *HU* Hungary, *IR* Ireland, IT Italy, *LT* Lithuania, *MA* Malta, *NL* The Netherlands, *PT* Portugal, *CZ* Czech Republic, *UK* United Kingdom, *RO* Romania, *SW* Sweden. DP: Dispensing prescriptions; DM: Disposal medicines; HS: Homecare services; M1: Medication Review type 1; M2: Medication Review type 1; IP: Information to patients on conditions or treatments; NS: New medicines services; BM: Blood pressure measurement; CM: Cholesterol measurement; WM: Weight measurement; HM: Hypertension management. All pharmacy services that are represented with acronyms 'bold' were implemented this year. a: 28 EU countries; T2DM: Diabetes management; GM: Glucose measurement.