### Additional file 3

Table 1: Extracted data from studies

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | | | **Reported approaches - methodology** | | | | | | | |
|  | **Year** | **Country** | **Based on existing methods** | **Refined and validated** | **Experience and expertise** | **Lit review** | **Data synthesis and amalgamation** | **Data extraction** | **Iteratively developed** | **Lab work results** | |
| Achillas(15) | 2014 | Greece |  |  |  |  |  |  |  |  | |
| Anagnostou(16) | 2016 | UK |  |  |  |  |  |  |  |  | |
| Battini(17) | 2011 | Italy |  |  |  |  |  |  |  |  | |
| Chesson(1) | 2016 | US |  |  |  |  |  |  |  |  | |
| Dean(18) | 2017 | UK |  |  |  |  |  |  |  |  | |
| George(19) | 2012 | Italy |  |  |  |  |  |  |  |  | |
| Halbe(20) | 2018 | Canada |  |  |  |  |  |  |  |  | |
| Ianni(21) | 2013 | Spain |  |  |  |  |  |  |  |  | |
| Kallio(2) | 2016 | Finland |  |  |  |  |  |  |  |  | |
| Kumar(22) | 2018 | China |  |  |  |  |  |  |  |  | |
| Kumke(3) | 2016 | Germany |  |  |  |  |  |  |  |  | |
| Lee(23) | 2014 | Korea |  |  |  |  |  |  |  |  | |
| Linek(24) | 2010 | Austria |  |  |  |  |  |  |  |  | |
| Lopes(25) | 2017 | Portugal |  |  |  |  |  |  |  |  | |
| Nicod(26) | 2016 | UK |  |  |  |  |  |  |  |  | |
| Pahl-Wostl(4) | 2010 | Germany |  |  |  |  |  |  |  |  | |
| Panagiotopoulou(27) | 2014 | Greece |  |  |  |  |  |  |  |  | |
| Procházka(28) | 2017 | Czech Republic |  |  |  |  |  |  |  |  | |
| Reed(29) | 2013 | UK |  |  |  |  |  |  |  |  | |
| Reidsma(30) | 2009 | Netherlands |  |  |  |  |  |  |  |  | |
| Rodgers (9) | 2016 | UK |  |  |  |  |  |  |  |  | |
| Schmitt(31) | 2015 | Germany |  |  |  |  |  |  |  |  | |
| Stratigea(32) | 2013 | Greece |  |  |  |  |  |  |  |  | |
| Stremke(33) | 2012 | The Netherlands |  |  |  |  |  |  |  |  | |
| Squires(5) | 2016 | UK |  |  |  |  |  |  |  |  | |
| Sun(34) | 2013 | US |  |  |  |  |  |  |  |  | |
| Tappenden(39) | 2012 | UK |  |  |  |  |  |  |  |  | |
| Tondel(36) | 2014 | UK |  |  |  |  |  |  |  |  | |