

## Supplementary material 1

| Study ID        | Outcome                                      | D1 | D2 | D3 | D4 | D5 | Overall |                                           |
|-----------------|----------------------------------------------|----|----|----|----|----|---------|-------------------------------------------|
| Altaweel, 2021  | Serum alkaline phosphatase                   | +  | +  | +  | +  | +  | +       | +                                         |
| Altaweel, 2021  | Serum calcium                                | +  | +  | +  | +  | +  | +       | !                                         |
| Altaweel, 2021  | Serum Phosphorus                             | +  | +  | +  | +  | +  | +       | -                                         |
| Benjawan, 2022  | C-telopeptide of type 1 collagen             | +  | !  | +  | +  | +  | !       |                                           |
| Benjawan, 2022  | Procollagen type 1 amino-terminal propeptide | +  | !  | +  | +  | +  | !       | D1 Randomisation process                  |
| Benjawan, 2022  | Serum calcium                                | +  | +  | +  | +  | +  | +       | D2 Deviations from Intended Interventions |
| Lingram, 2014   | Serum calcium                                | !  | !  | +  | +  | +  | !       | D3 Missing outcome data                   |
| Lingram, 2014   | Serum phosphorus                             | !  | !  | +  | +  | +  | !       | D4 Measurement of the outcome             |
| Lingram, 2014   | Serum parathyroid hormone                    | !  | !  | +  | +  | +  | !       | D5 Selection of the reported result       |
| Managutti, 2015 | Serum alkaline phosphatase                   | !  | !  | +  | +  | !  | -       |                                           |
| Nayak, 2019     | Serum alkaline phosphatase                   | !  | !  | +  | +  | +  | !       |                                           |
| Nayak, 2019     | Serum calcium                                | !  | !  | +  | +  | +  | !       |                                           |
| Nayak, 2019     | Serum phosphorus                             | !  | !  | +  | +  | +  | !       |                                           |
| PG, 2023        | Serum alkaline phosphatase                   | +  | +  | +  | +  | +  | +       |                                           |
| PG, 2023        | Serum calcium                                | +  | +  | +  | +  | +  | +       |                                           |
| PG, 2023        | Serum parathyroid hormone                    | !  | +  | +  | +  | +  | !       |                                           |
| Singh, 2013     | Osteopontin expression in CD4+ T cell        | +  | -  | -  | !  | !  | -       |                                           |
| Singh, 2013     | Osteopontin protein                          | +  | -  | -  | !  | !  | -       |                                           |
| Singh, 2013     | Serum alkaline phosphatase                   | +  | -  | -  | !  | !  | -       |                                           |
| Singh, 2013     | Serum calcium                                | +  | -  | -  | !  | !  | -       |                                           |

Figure S1. Risk of bias assessment of the included studies investigating the effects of *Cissus quadrangularis* interventions.