**Appendix 1. List of excluded studies and exclusion reason.**

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| Exclusion reason |  |
| BMI in childhood, adolescence, early adulthood | [1,2,3] and so on |
| Surgery | [4,5,6,7,8,9,10,11,12,13,14,15,16,17,18] and so on |
| Review and meta-analysis | [19,20,21,22,23,24,25] and so on |
| Rationale and design | [26,43] and so on |
| Diabetic complication | [27] and so on |
| Not relevant data | [28,29,30,31,32,33,34,35,36,37] and so on |
| Patients | [38,39,40,41,42,43] and so on |
| Not relevant outcome | [44,45,46,47] and so on |
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