**Internal validity**

1. EM equipment functions correctly
2. All EM-bottle openings correspond to actual intake of the prescribed dose
3. EM does not influence typical adherence behavior
4. Use of EM does not bias the sample representativeness

**External validity**

Refusal to participate -out
Drop Loss of data

**Assumption**

1. EM equipment functions correctly
2. All EM-bottle openings correspond to actual intake of the prescribed dose
3. EM does not influence typical adherence behavior
4. Use of EM does not bias the sample representativeness

**Processes violating this assumption?**

1. Non-functioning EM system technology
   - Registration failures
   - Too many registrations

2. Correct intake of prescribed drugs from a non-EM source (e.g., after having removed the prescribed dose from the EM bottle)
3. Opening of the EM bottle without ingestion or with ingestion occurring at a later time
4. Ingestion of a dose larger or smaller than dose prescribed

**Effect of the violation**

1. Overestimation of non-adherence
2. Underestimation of non-adherence