**Supplementary Materials S3**

**Outcome definitions**

**Operative time (OT):** Time from skin incision to completion of wound closure (minutes).

**Prepuce oedema time (POT):** Duration from the onset of postoperative prepuce oedema until its resolution (days), as recorded by surgeons during follow-up or reported by parents.

**Estimated blood loss (EBL):** Amount of intraoperative blood loss, reported in milliliters.

**Length of stay (LOS):** Number of days from the date of surgery to hospital discharge.

**Postoperative penis length (PPL):** Length of the penis in a flaccid state measured after surgery (cm), usually assessed with a ruler.

**Postoperative penis extension length (PPEL):** Length of the penis under maximal stretching after surgery (cm), compared with preoperative measurements to reflect extension.

**Prepuce oedema:** Presence of swelling of the prepuce during postoperative follow-up, observed and recorded by the surgeon.

**Penile retraction:** Retraction of the penis after surgery due to skin or fibrous tissue traction, observed in follow-up or reported by parents.

**Postoperative pain:** Pain intensity assessed by standardized pain scores (e.g., visual analogue scale, VAS) or inferred from analgesic use.

**Complications:** Postoperative adverse events including prepuce oedema, penile retraction, wound infection, hematoma, and others; if available, graded according to the Clavien-Dindo classification.

**Satisfaction:** Postoperative satisfaction reported by parents or patients using questionnaires or subjective rating scales.

**Effectiveness:** Defined in most studies as satisfactory penile exposure and improvement in penile appearance or function after surgery; categorized as “effective” or “ineffective” according to the criteria used in each original study.