# A randomized, crossover trial comparing the efficacy and safety of fesoterodine and extended-release oxybutynin in children with overactive bladder with 12-month extension on fesoterodine: The FOXY study

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**Supplementary Table 1. Inclusion/exclusion criteria**

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| **Exclusion criteria** |
| – Dysfunctional voiding (bad voiding habits, detrusor-sphincter dyssynergia [DSD]) |
| – Post-void residual (PVR) > 20 mL |
| – Polyuria (>75 mL/kg/24 h) |
| – Nephrogenic or central diabetes insipidus |
| – Constipation or urinary tract infection (UTI) (eligible is successfully treated) |
| – Untreated or uncontrolled arterial hypertension |
| – QTcB interval >460 ms |
| – Regarding cardiovascular safety, a systolic or diastolic blood pressure variation of 20 or 15 mmHg, respectively, or a 20% increase in heart rate at rest was deemed significant. Similarly, a QTcB interval ≥460 ms or any increase of 30 ms on followup ECG was considered concerning and would engender an evaluation in cardiology, dose reduction, or drug discontinuation |
| – Serum creatinine ≥2 times the upper limit of normal (ULN) |
| – AST or ALT ≥2 times the ULN or bilirubin ≥1.5 time the ULN |
| – Known hypersensitivity to either fesoterodine or oxybutynin or any contraindication to the use of these medications according to product monography |
| – Consumption of a medication known to interact with fesoterodine that cannot be discontinued |
| – Pregnancy or intention to become pregnant |
| – Other clinically significant unstable medical condition |
| **Inclusion criteria** |
| – Male or female ≥5 years old and ≤14 years old |
| – OAB diagnosis according to the International Children Continence Society (ICCS) and less than 65% of the expected mean bladder capacity for age is confirmed ([age (years) + 1] x 30 mL) on a 3-day voiding diary |
| – Weight and height are within the normal percentile (3rd to 97th percentile) and weight is ≥20 kg (3rd percentile of an 8-year-old child, boy or girl), according to the CDC growth chart |
| – Ability to swallow pills |
| – Subjects/parents (vs. legal guardian) agree to participate to the following study and sign the informed consent/assent |
| – Normal flow rate index |
| – Subjects/parents (or legal guardian) are able to comply with the study requirements and with the medication restrictions |
| – Female subjects of childbearing potential must have a negative serum or urine pregnancy test at enrollment and must agree to maintain highly effective birth control during the study. Sexually active male subjects agree to use a barrier method of birth control with female partner for the duration of the study and at least one month after ending study treatment. Sexually active male subjects agree to use a condom for the duration of the study and for at least one month after ending study treatment and the female partner to use a reliable form of birth control for the duration of the study and for at least one month after ending study treatment |

**Supplementary Table 2. Details on study methods**

- V1–V2: Washout from any antimuscarinics. Normal flow rate index confirmed. Confirm conservative OAB treatment (timed voiding, adequate voiding technique, fluid management, and bowel management if necessary)
- Safety measures at every V: vital signs (blood pressure, heart rate, triplicate 12-lead ECG (QTcB), and urinalysis
- Laboratory parameters (complete blood count, renal and liver function tests) at V1, 3, 4, and 7
- V2: Patients were randomized in a 1:1 ratio to group Feso-Oxy or group Oxy-Feso
- 3-day voiding diary (VD) provided at each visit
- V3: 3-day washout period prior to second medication
- At mid-course of each phase (after 4 weeks), parents were offered the possibility to double the medication dose (Feso 8 mg or Oxy 20 mg QD) during a telephone interview with the research nurse
- V4: Patients/parents were asked to identify their favorite treatment phase
- If they chose fesoterodine, they could enter the extension phase if they wanted. For patients that entered the extension study, the last visit of the crossover study (V4) would also serve as the first visit of the extension study (V5- time- 4 months)
- At V5, patients from group Feso-Oxy restarted Feso at the last well-tolerated dose, and patients from group Oxy-Feso continued Feso at the same dose
- V6: Dose increase was again discussed if the patient was still on the 4 mg dose
- V6, V7, and V8 occurred at 4-month intervals after V5
- If patients experienced significant TEAR or if the patient was dry (no incontinence), without grade 2 or 3 urgency episodes, and with %EBC consistently ≥75% on VD, dose-tapering or cessation was considered
- If dose tapering was initiated at V6, a nurse contacted the parents one month after the changes to either return to a higher dose or to consider medication cessation. At V7, dose-tapering was initiated for one month, followed by medication cessation, unless the patient was still symptomatic. In that case, dose-tapering was to be initiated two months after V7, followed by medication cessation one month later. Therefore, every patient had attempted medication cessation prior to V8

**Supplementary Table 3. The patient perception of bladder condition (PPBC) scale**

| My bladder condition | |
|---|---|
| 1 | Does not cause me any problems at all |
| 2 | Causes me some very minor problems |
| 3 | Causes me some minor problems |
| 4 | Causes me (some) moderate problems |
| 5 | Causes me severe problems |
| 6 | Causes me many severe problems |