CAPTAIN Study: Effects of Fluticasone Furoate/Umeclidinium/Vilanterol on FEV1, Improvement in Asthma According to Age

**Background**
- The Phase IIIA CAPTAIN study evaluated the efficacy and safety of once-daily fluticasone furoate/umeclidinium/vilanterol (FF/UMEC/VI) in patients with moderate-to-severe, uncontrolled asthma.
- **Methods**
  - The study design is shown in Figure 1.
  - We report post hoc analyses of absolute change in lung function (adding UMEC or doubling FF dose) in all age subgroups (18–44 years, 44–<54, 54–<63, ≥63 years).
  - Baseline demographics were generally similar across all age subgroups; most patients were female, overweight, and had no asthma comorbidities.
  - However, there was a suggestion for greater improvement in younger (18–44 years) versus older (44–<54, 54–<63, ≥63 years) subgroups with respect to doubling the dose of FF in dual therapy (Figure 4).
  - Adding a LAMA to medium-dose ICS/LABA* was more beneficial in younger patients (18–44 years) versus older patients (44–<54, 54–<63, ≥63 years) when doubling FF dose in dual therapy (Figure 4).

**Results**
- **Baseline demographics** were generally similar across all age subgroups; most patients were female, overweight, and had no asthma comorbidities.
- Baseline lung function was greater among younger patients, than older patients (Table 1).
- In the overall ITT population, addition of UMEC 62.5 mcg to FF significantly improved trough FEV1, in both FF/VI 100/25 mcg and FF/UMEC/VI 100/62.5/25 mcg (Figure 2).
- Adding UMEC to FF/VI was associated with improvements in asthma control (ACQ-7) in all age subgroups assessed (Figure 3).
- Doubling the dose of FF appeared to have less of an impact than adding UMEC in older patients, while doubling the dose of FF in younger patients improved lung function regardless of age.

**Conclusions**
- Adding UMEC to FF is associated with greater improvements in lung function and asthma control in younger patients versus older patients.
- Doubling the dose of FF in dual therapy is more beneficial in younger patients (18–44 years) versus older patients (44–<54, 54–<63, ≥63 years).

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