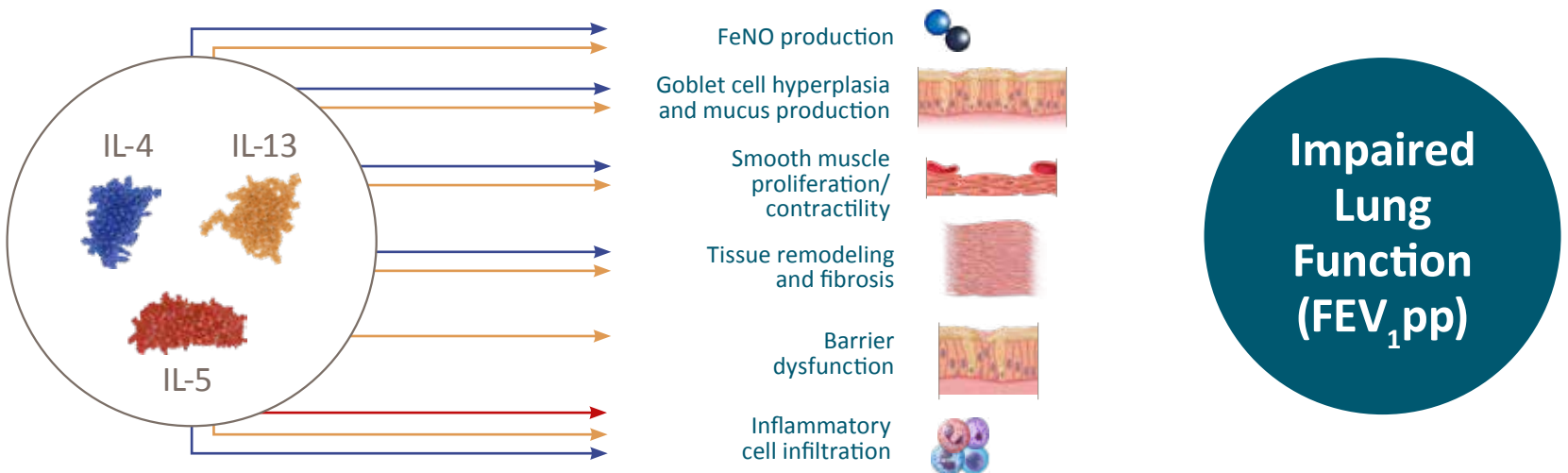


# FEV<sub>1</sub> Percent Predicted Is a Marker of Lung Health in Pediatric Asthma

## What is FEV<sub>1</sub>pp?<sup>1-3</sup>

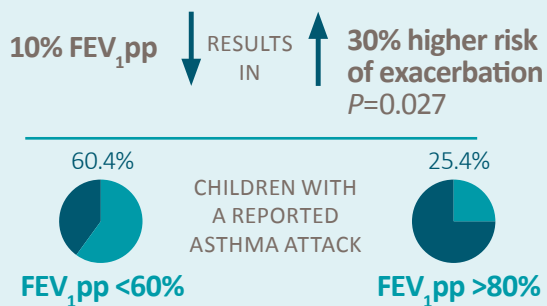
- ⊘ A predicted FEV<sub>1</sub> percentage adjusted for age, sex, and body composition
- ⊘ A normalized value that may be more accurate for use in children than an absolute volume due to constant lung growth
- ⊘ A spirometric measurement used for diagnosing and grading current asthma and assessing future asthma risk

Type 2 Inflammatory Cytokines<sup>3</sup> → Pathophysiological Features<sup>4-11</sup> → Clinical Consequences<sup>12-14</sup>



FEV<sub>1</sub>pp, as a marker of lung function, and FeNO, as a marker of airway inflammation, may be used in conjunction with asthma symptoms to guide asthma management in children<sup>15</sup>

### INCREASED RISK OF EXACERBATION<sup>15,16</sup>



↓ FEV<sub>1</sub>pp is associated with:

INCREASED ASTHMA SEVERITY<sup>17</sup>

POOR ASTHMA CONTROL AND REDUCED QUALITY OF LIFE<sup>18,19</sup>

### INCREASED ASTHMA-RELATED EVENTS<sup>20\*</sup>

4.1x with FEV<sub>1</sub>pp <60% versus patients with FEV<sub>1</sub>pp ≥100%

1.9x with FEV<sub>1</sub>pp 60%-79%

### REDUCED LUNG GROWTH LATER IN LIFE<sup>21</sup>

8.6x higher odds with 10% decrease in FEV<sub>1</sub>pp measured at age 5 to 12 yearst

\*Asthma-related events were defined as an emergency department visit, hospital admission, or steroid burst for asthma.

tCompared with patients with normal lung growth.

FeNO, fractional exhaled nitric oxide; FEV<sub>1</sub>, forced expiratory volume in 1 second; FEV<sub>1</sub>pp, FEV<sub>1</sub> percent predicted; IL, interleukin.

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