

April 2017 ~ Resource #330402

Inhaled Corticosteroid Dose Comparison in Asthma

The chart below provides inhaled corticosteroid dose comparisons based on clinical trials in **asthma** without a spacer. Consider extent of control and disease severity when switching. Doses are approximate; monitor response closely and adjust dose as appropriate. **Some information may differ from U.S. prescribing information.**

Abbreviations: DPI=dry powder inhaler; HFA=hydrofluoroalkane.

a. Based on references 1, 6, and 12 unless otherwise denoted.

Medication/ strengths available	Comparative Daily Doses ^a					
	12 yrs and older Low Range	12 yrs and older Medium Range	12 yrs and older High Dose	5 to 11 yrs Low Range	5 to 11 yrs Medium Range	5 to 11 yrs High Dose
Beclomethasone HFA (<i>QVAR</i>) 40 mcg/ inhalation, 80 mcg/ inhalation	80 mcg to 240 mcg	280 mcg to 480 mcg (Max FDA- approved dose for age ≥12 yrs is 320 mcg twice daily. ²)	>480 mcg (Max FDA- approved dose for age ≥12 yrs is 320 mcg twice daily. ²)	80 mcg to 160 mcg	200 mcg to 320 mcg (Max FDA-approved dose for ages 5 to 11 yrs is 80 mcg twice daily. ²)	>320 mcg (Max FDA-approved dose for ages 5 to 11 yrs is 80 mcg twice daily. ²)
Budesonide DPI (<i>Pulmicort Flexhaler</i>) 90 mcg/ inhalation, 180 mcg/ inhalation	180 mcg to 540 mcg	630 mcg to 1170 mcg (Max FDA- approved dose for ages 6 to 17 yrs is 360 mcg twice daily. ³)	>1200 mcg (Max FDA- approved dose for ages 6 to 17 yrs is 360 mcg twice daily, and 720 mcg twice daily for ages 18 yrs and older. ³)	180 mcg to 360 mcg (FDA-approved for children 6 to 17 yrs of age. ³)	450 mcg to 720 mcg (FDA-approved for children 6 to 17 yrs of age. ³)	>800 mcg (FDA-approved for ages 6 to 17 yrs. Max dose 360 mcg twice daily. ³)

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Medication/ strengths available	Comparative Daily Doses ^a					
	12 yrs and older Low Range	12 yrs and older Medium Range	12 yrs and older High Dose	5 to 11 yrs Low Range	5 to 11 yrs Medium Range	5 to 11 yrs High Dose
Budesonide nebulizer suspension (<i>Pulmicort Respules</i>) 0.25 mg/2 mL, 0.5 mg/2 mL, 1 mg/2 mL	FDA approved for children 12 mos to 8 yrs of age. ⁴	FDA approved for children 12 mos to 8 yrs of age. ⁴	FDA approved for children 12 mos to 8 yrs of age. ⁴	0.5 mg (FDA approved for children 12 mos to 8 yrs of age. ⁴)	1 mg (FDA approved for children 12 mos to 8 yrs of age. ⁴)	2 mg (FDA-approved for children 12 mos to 8 yrs of age. Max dose 1 mg. ⁴)
Budesonide/formoterol HFA (<i>Symbicort</i>) 80/4.5 mcg or 160/4.5 mcg per inhalation	320/18 mcg ¹⁵	320/18 mcg to 640/18 mcg ¹⁵	640/18 mcg ¹⁵	FDA approved dose in children 6 to 12 yrs of age is 160 mcg/9 mcg twice daily. ¹⁵	FDA approved dose in children 6 to 12 yrs of age is 160 mcg/9 mcg twice daily. ¹⁵	FDA approved dose in children 6 to 12 yrs of age is 160 mcg/9 mcg twice daily. ¹⁵
Ciclesonide HFA (<i>Alvesco</i>) 80 mcg/ inhalation, 160 mcg/ inhalation	80 mcg to 160 mcg	>160 mcg to 320 mcg	>320 mcg (Max dose 320 mcg twice daily. ⁵)	80 mcg (FDA-approved for age ≥12 yrs. ⁵)	>80 to 160 mcg (FDA-approved for age ≥12 yrs. ⁵)	>160 mcg (FDA-approved for age ≥12 yrs. Max dose 320 mcg twice daily. ⁵)
Flunisolide HFA (<i>Aerospan</i>) 80 mcg/ inhalation	320 mcg	400 mcg to 640 mcg	>640 mcg (Max FDA-approved dose for age ≥12 yrs is 320 mcg twice daily. ⁷)	160 mcg	320 mcg (FDA-approved for children 6 to 11 yrs of age. ⁷)	≥640 mcg (FDA-approved for children 6 to 11 yrs of age. Max dose 160 mcg twice daily. ⁷)

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Medication/ strengths available	Comparative Daily Doses ^a					
	12 yrs and older Low Range	12 yrs and older Medium Range	12 yrs and older High Dose	5 to 11 yrs Low Range	5 to 11 yrs Medium Range	5 to 11 yrs High Dose
Fluticasone furoate DPI (<i>Arnuity Ellipta</i>) 100 mcg/blister, 200 mcg/blister	100 mcg	N/A	200 mcg	Not FDA- approved for children <12 yrs of age. ¹⁶	Not FDA-approved for children <12 yrs of age. ¹⁶	Not FDA-approved for children <12 yrs of age. ¹⁶
Fluticasone furoate/ vilanterol DPI (<i>Breo Ellipta</i>) 100/25 mcg or 200/25 mcg per blister	100/25 mcg (FDA-approved only for adults age 18 and older. ¹⁷)	N/A	200/25 mcg (FDA-approved only for adults age 18 and older. ¹⁷)	FDA-approved only for adults age 18 and older. ¹⁷	FDA-approved only for adults age 18 and older. ¹⁷	FDA-approved only for adults age 18 and older. ¹⁷
Fluticasone propionate HFA (<i>Flovent-HFA</i>) 44 mcg/ inhalation, 110 mcg/ inhalation, 220 mcg/ Inhalation	88 mcg to 264 mcg	264 mcg to 440 mcg	>440 mcg (Max FDA- approved dose for age \geq 12 yrs is 880 mcg twice daily. ⁸)	88 mcg to 176 mcg (FDA-approved for children 4 to 11 yrs of age. ⁸)	220 mcg to 352 mcg (Max FDA-approved dose for children 4 to 11 yrs of age is 88 mcg twice daily. ⁸)	>352 mcg (Max FDA-approved dose for children 4 to 11 yrs of age is 88 mcg twice daily. ⁸)
Fluticasone propionate/ salmeterol HFA (<i>Advair HFA</i>) 50/25 mcg, 125/25 mcg, or 250/25 mcg per inhalation	100/50 to 250/50 mcg	300/50 mcg to 500/50 mcg	>500/50 mcg (Max FDA- approved dose for age \geq 12 yrs is 500/50 mcg twice daily. ¹¹)	Not FDA- approved for children <12 yrs of age. ¹¹	Not FDA-approved for children <12 yrs of age. ¹¹	Not FDA-approved for children <12 yrs of age. ¹¹

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Medication/ strengths available	Comparative Daily Doses ^a					
	12 yrs and older Low Range	12 yrs and older Medium Range	12 yrs and older High Dose	5 to 11 yrs Low Range	5 to 11 yrs Medium Range	5 to 11 yrs High Dose
Fluticasone propionate/ salmeterol DPI (<i>Advair Diskus</i>) 100/50 mcg, 250/50 mcg, or 500/50 mcg per blister	100/50 mcg to 350/100 mcg	350/100 mcg to 500/100 mcg	>500/50 mcg (Max FDA- approved dose for age \geq 12 yrs is 500/50 mcg twice daily. ¹³)	100/50 mcg to 200/100 mcg (FDA-approved for children 4 to 11 yrs of age at a dose of 100/50 mcg twice daily. ¹³)	250/50 mcg to 350/100 mcg (FDA-approved for children 4 to 11 yrs of age at a dose of 100/50 mcg twice daily. ¹³)	>500/50 mcg (FDA-approved for children 4 to 11 yrs of age at a dose of 100/50 mcg twice daily. ¹³)
Fluticasone propionate/ salmeterol DPI (<i>Airduo Resplick</i>) 55/14 mcg, 113/14 mcg, or 232/14 mcg per inhalation	110/28 mcg ¹⁸	226/28 mcg ¹⁸	464/28 mcg ¹⁸	Not FDA- approved for children <12 yrs of age. ¹⁸	Not FDA-approved for children <12 yrs of age. ¹⁸	Not FDA-approved for children <12 yrs of age. ¹⁸
Fluticasone propionate DPI (<i>Armonair Resplick</i>) 55 mcg, 113 mcg, or 232 mcg per inhalation	110 mcg ¹⁹	226 mcg ¹⁹	464 mcg ¹⁹	Not FDA- approved for children <12 yrs of age. ¹⁹	Not FDA-approved for children <12 yrs of age. ¹⁹	Not FDA-approved for children <12 yrs of age. ¹⁹
Fluticasone propionate DPI (<i>Flovent Diskus</i>) 50 mcg/blister, 100 mcg/blister, 250 mcg/blister	100 mcg to 300 mcg	350 mcg to 500 mcg	>500 mcg (Max FDA- approved dose for age \geq 12 yrs is 1000 mcg twice daily. ⁹)	100 mcg to 200 mcg (FDA-approved for children 4 to 11 yrs of age. ⁹)	250 mcg to 400 mcg (Max FDA-approved dose for children 4 to 11 yrs of age is 100 mcg twice daily. ⁹)	>400 mcg (Max FDA-approved dose for children 4 to 11 yrs of age is 100 mcg twice daily. ⁹)

More...

Medication/ strengths available	Comparative Daily Doses ^a					
	12 yrs and older Low Range	12 yrs and older Medium Range	12 yrs and older High Dose	5 to 11 yrs Low Range	5 to 11 yrs Medium Range	5 to 11 yrs High Dose
Mometasone DPI (<i>Asmanex Twisthaler</i>) 110 mcg/ inhalation, 220 mcg/ inhalation	110 mcg to 220 mcg	330 mcg to 440 mcg	>440 mcg (Max FDA- approved dose for age \geq 12 yrs is 440 mcg twice daily. ¹⁰)	110 mcg (FDA-approved for children 4 to 11 yrs of age. ¹⁰)	220 mcg to <440 mcg (Max FDA-approved dose for children 4 to 11 yrs of age is 110 mcg once daily. ¹⁰)	\geq 440 mcg (Max FDA-approved dose for children 4 to 11 yrs of age is 110 mcg once daily. ¹⁰)
Mometasone/ Formoterol HFA (<i>Dulera</i>) 100/5 mcg or 200/5 mcg per inhalation	N/A	400/20 mcg ¹⁴	800/20 mcg ¹⁴	Not FDA- approved for children <12 yrs of age. ¹⁴	Not FDA-approved for children <12 yrs of age. ¹⁴	Not FDA-approved for children <12 yrs of age. ¹⁴

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication





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Project Leader in preparation of this clinical resource (330402): *Melanie Cupp, Pharm.D., BCPS*

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Cite this document as follows: Clinical Resource, *Inhaled Corticosteroid Dose Comparison in Asthma. Pharmacist's Letter/Prescriber's Letter. April 2017.*

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