

Impact of Flow Restrictors on Aerosol Delivery of the Respimat[®] Soft Mist Inhaler

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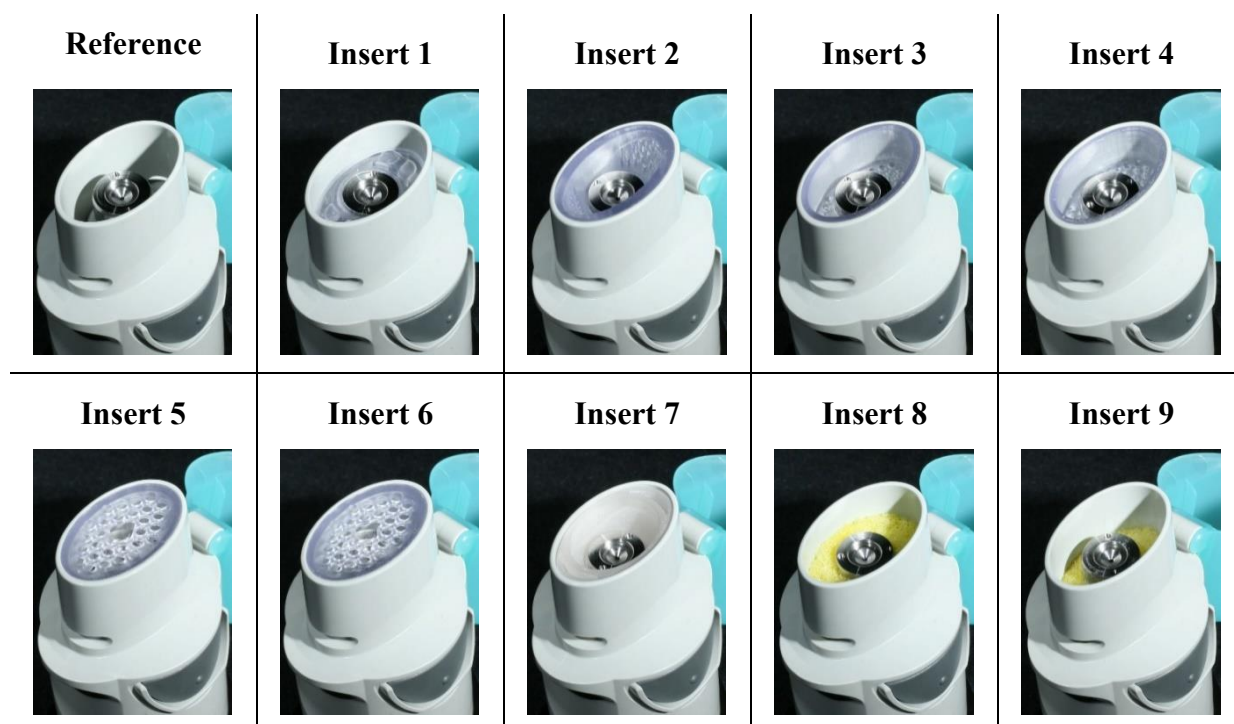
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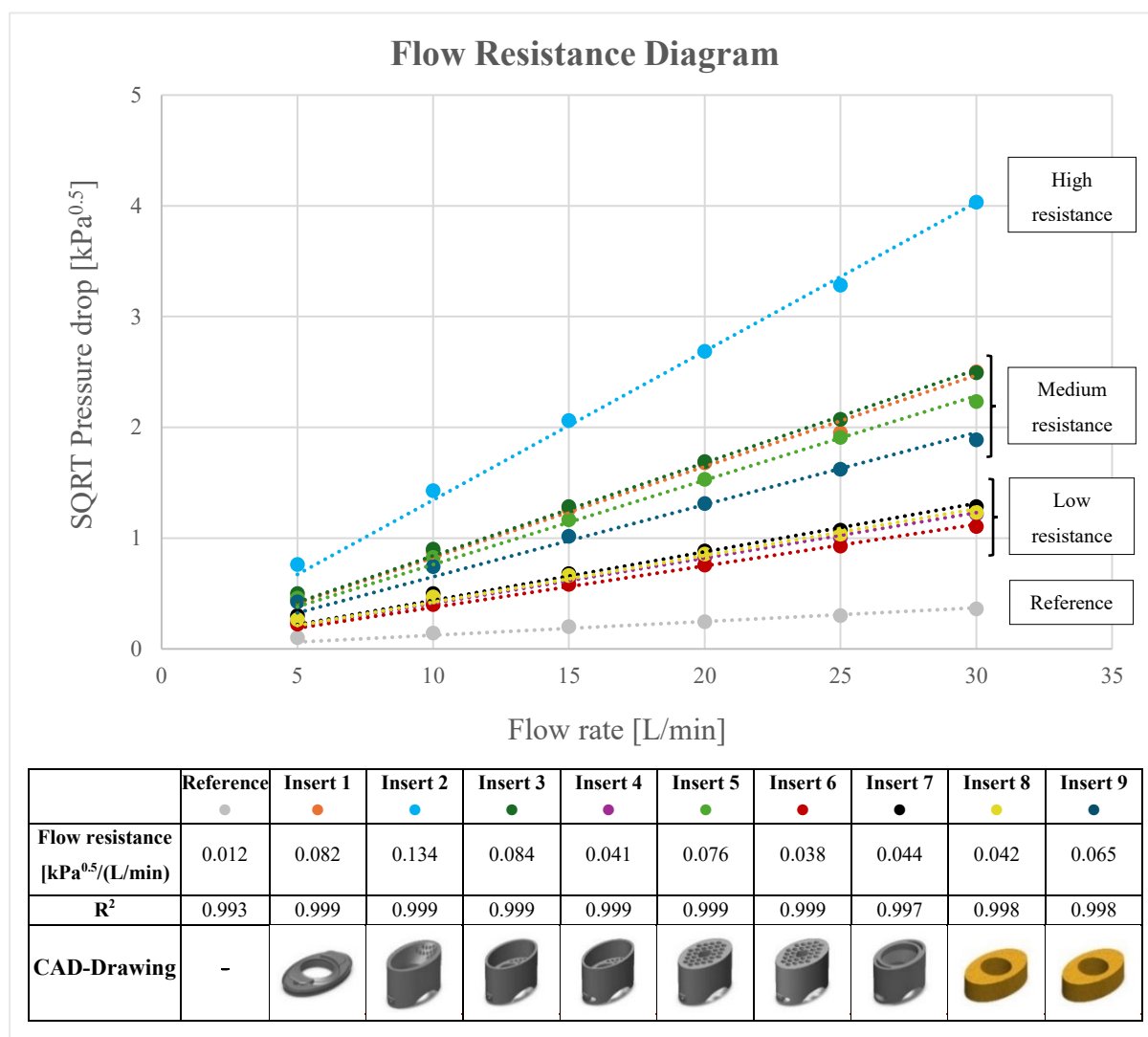
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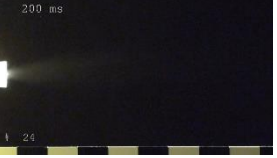
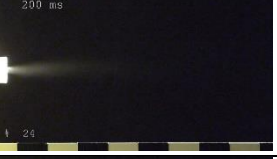
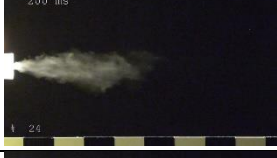
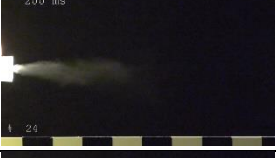
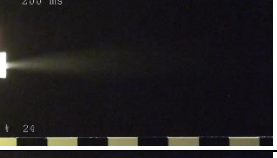
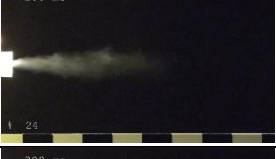
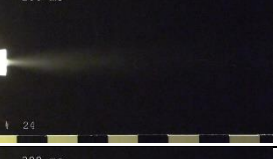
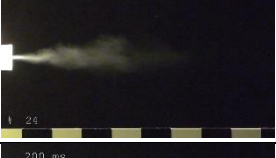
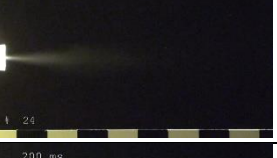
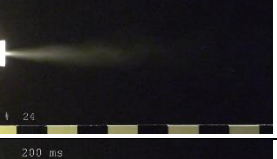
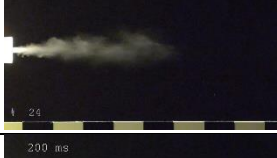
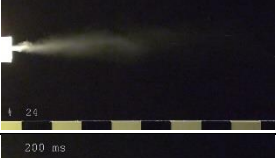
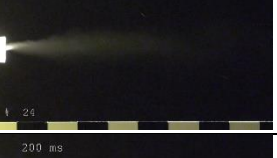


Supplementary Figure 1: Photographic images of various flow restrictors investigated added into the mouthpiece of the Respimat SMI. For reference, a Respimat without insert is shown above left. Inserts 1-7 were created using 3D- printing, while foam material was used for Inserts 8 and 9.



Supplementary Figure 2: Flow resistance shown as square root (SQRT) of pressure drop [kPa^{0.5}] as a function of flow rate [L/min]. Inserts categorized into low resistance, medium resistance and high resistance. Low resistance Insert 4 (violet), Insert 7 (black) and Insert (yellow) 8 are partially superimposed in this diagram, as they happened to show very similar flow resistances.

Supplementary Table 1: Overview of captured aerosol clouds during plume velocity measurements 0.2s after the spray was triggered.

	15 L/min	30 L/min	60 L/min
Reference			
Insert 1			
Insert 2			
Insert 3			
Insert 4			
Insert 5			
Insert 6			
Insert 7			
Insert 8			
Insert 9			