Dear Patient,

Your inhalation therapy requires a lot of time and discipline.

Mixing different inhalation solutions and suspensions for simultaneous inhalation is one possibility to shorten this time-consuming procedure. However, mixing the inhalation solutions in the nebulizer is only recommended if compatibility of the admixtures is proven.

This leaflet provides information about the compatibility of selected drug solution mixtures. Please find the information in table format, visualized by the traffic light principle.

**Attention:** These admixtures are not licensed drugs. The advices are based on in vitro studies concerning only stability and physico-chemical compatibility of the mixtures.

**Please follow the recommendations:**

Unused mixtures must be discarded.

- **Mixable**
  - Compatibility of mixtures is proven

- **Do not mix**
  - Compatibility of mixtures has not been studied yet

- **Do not mix**
  - Incompatibility of mixtures is proven

If you have any questions or problems don’t hesitate to contact the authors

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**References**


For further references please contact the authors.

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**Compatibility of inhalation solutions/suspensions ©**

Choose your drug in the top line and the second one in the column on the left. In the field where the line and the column intersect, you will find information about the compatibility of the eligible combination according to the traffic light principle (legend see reverse side).

<table>
<thead>
<tr>
<th>Tested brands</th>
<th>Dornase alfa</th>
<th>Tobramycin</th>
<th>Tobramycin</th>
<th>Colistimethate</th>
<th>Ipratropium</th>
<th>Albuterol</th>
<th>Budesonide</th>
<th>Fluticasone-17-propionate</th>
<th>Cromolyn</th>
<th>Hypertonic saline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dornase alfa</td>
<td>Pulmozyme®</td>
<td>Mixable #</td>
<td>Do not mix</td>
<td>Do not mix</td>
<td>Do not mix</td>
<td>Mixable</td>
<td>Do not mix</td>
<td>Do not mix</td>
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<tr>
<td>Tobramycin</td>
<td>Bramitob®, TOBI®, Gernebcin®</td>
<td>Do not mix</td>
<td>Mixable</td>
<td>Mixable</td>
<td>Mixable</td>
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<tr>
<td>Tobramycin</td>
<td>Gernebcin® 160 mg</td>
<td>Do not mix</td>
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<td>Mixable</td>
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<tr>
<td>Colistimethate</td>
<td>Colistin CF®</td>
<td>Do not mix</td>
<td>Mixable</td>
<td>Mixable</td>
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</tr>
<tr>
<td>Ipratropium</td>
<td>Atrovent®, Atrovent®</td>
<td>Do not mix</td>
<td>Mixable</td>
<td>Mixable</td>
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<td>Albuterol</td>
<td>Sultanol®, Sultanol®</td>
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<tr>
<td>Budesonide</td>
<td>Pulmicort®</td>
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<td>Mixable</td>
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<tr>
<td>Fluticasone</td>
<td>Flutide®</td>
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<tr>
<td>Cromolyn</td>
<td>Intal®</td>
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<td>Do not mix</td>
<td>Do not mix</td>
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<tr>
<td>Hypertonic saline</td>
<td>5.85% NaCl-solution</td>
<td>Do not mix</td>
<td>Do not mix</td>
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<td>Mixable</td>
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</tbody>
</table>

* Mixtures not recommended from a clinical point of view  ** Compatibility is only proven for preservative free dosage forms  

# unchanged aerosol characteristics and unchanged drug output is proven

**Compatibility of the following triple and quadripartite admixtures is proven:**
- Ipratropium (Atrovent®) + Albuterol (Sultanol®) + Tobramycin (TOBI® or GERNEBCIN®)
- Ipratropium + Fenoterol (Berodual®) + Budesonide (Pulmicort®)
- Ipratropium (Atrovent®) + Albuterol (Sultanol®) + Fluticasone-17-propionate (Flutide®)
- Ipratropium (Atrovent® unit dose 2 ml) + Albuterol (Sultanol® unit dose 2.5 ml) + Cromolyn (e.g. Intal®)
- Ipratropium (Atrovent® unit dose 2 ml) + Albuterol (Sultanol® unit dose 2.5 ml) + Fluticasone-17-propionate (Flutide®) + Colistimethate (Colistin CF®)

Prepare your inhalation solution mixture only immediately before the nebulization. Remaining unused admixtures are to be discarded.