

## Supplement

**Table S1:** REAL survey.

Question	Response
1. Country where patient is based:	Germany Netherlands Brazil Japan France Italy UK USA Canada
2. Gender?	Male Female
3. How old are you?	40 to 49 years 50 to 59 years 60 to 59 years 70 to 75 years
4. Who diagnosed you with COPD?	General Practitioner/Primary Care Physician Pulmonologist
5. When were you been diagnosed with COPD?	Month: _____ Year: _____
6. Thinking about the severity of your condition, what did your doctor tell you? Did he/she tell you that you have _____ COPD?	Mild Moderate Severe Very Severe

7. During the screening process you have mentioned that you are currently using the following inhaler(s):	Breezhaler® Respimat® Ellipta® Genuair®
8. How long have you been using each of them?	Less than 6 months 6 months to 1 year 1 to 3 years 3 to 5 years More than 5 years I can't remember
9. Which of these inhalers do you use most often?	Most often 2nd most often 3rd most often
10. When you are using [specific inhaler], would you say it is...?	Very difficult to use Somewhat difficult to use Neither difficult nor easy Somewhat easy Very easy Please explain _____
11. How would you describe the way you inhale when using the [specific inhaler] inhaler?	Slow and deep Rapid and deep Rapid and shallow I don't know / I don't remember Please explain _____
<b>If using Respimat® inhaler</b>	
12. Do you exhale out before you inhale the drug using the Respimat® inhaler?	Yes No I don't know / I don't remember

<p><b>13.</b> How confident are you in knowing that you have inhaled a full dose from the Respimat® inhaler?</p>	<p>Very low confidence in knowing when I <u>have taken</u> a full dose</p> <p>Low confidence in knowing when I <u>have taken</u> a full dose</p> <p>Neither high nor low confidence</p> <p>Confident that I <u>have taken</u> a full dose</p> <p>Very confident that I <u>have taken</u> a full dose</p> <p>Please explain _____</p>
<p><b>14.</b> How often do you feel you may not have inhaled a full dose from the Respimat® inhaler?</p>	<p>I often feel like I've not had a full dose</p> <p>I sometimes feel like I have not had a full dose</p> <p>I rarely feel like I have not had a full dose</p> <p>I never feel like I have not had a full dose</p> <p>Please explain _____</p>
<p><b>15.</b> When you think you feel you have not inhaled a full dose from the Respimat® inhaler, what do you typically do?</p>	<p>I do nothing and just wait and see</p> <p>Inhale again without reactivating or reloading the device</p> <p>Inhale another dose at the same time</p> <p>Inhale another dose later</p> <p>Use a rescue inhaler</p> <p>Other – please specify: _____</p>
<p><b>16.</b> How many inhalations/puffs have you been advised to take for one full dose when using the Respimat® inhaler?</p>	<p>One</p> <p>Two</p> <p>Three</p> <p>Four</p> <p>Five</p> <p>Other: _____</p>

<p><b>17.</b> How frequently do you inhale your COPD medication using the Respimat® inhaler?</p>	<p>Once a day in the morning</p> <p>Once a day in the evening</p> <p>Twice a day (once in the morning, once in the evening)</p> <p>Other</p>
<p><b>18.</b> How many inhalations/puffs do you actually take (independently of what you were advised) when using the Respimat® inhaler? Please base your answer on the number of puffs you take each time you are inhaling with the Respimat® inhaler.</p>	<p>One</p> <p>Two</p> <p>Three</p> <p>Four</p> <p>Five</p> <p>Other: _____</p>
<p><b>If using Breezhaler® inhaler</b></p>	
<p><b>19.</b> How many capsules have you been advised to inhale in order to receive the full dose when using the Breezhaler® inhaler?</p>	<p>One</p> <p>Two</p> <p>Three</p> <p>Four</p> <p>Five</p> <p>Other: _____</p>
<p><b>20.</b> How frequently do you inhale your COPD medication using the Breezhaler® inhaler?</p>	<p>Once a day in the morning</p> <p>Once a day in the evening</p> <p>Twice a day (once in the morning, once in the evening)</p> <p>Other: _____</p>
<p><b>21.</b> How many capsules do you actually use (independently of what you were advised) when using the Breezhaler® inhaler? Please base your answer on the number of capsules you take each time you are inhaling with the Breezhaler® inhaler.</p>	<p>One</p> <p>Two</p> <p>Three</p> <p>Four</p> <p>Five</p> <p>Other: _____</p>

<b>If using Ellipta® inhaler</b>	
<b>22.</b> How many times have you been advised to activate the Ellipta® inhaler before inhaling the medication in order to take one full dose? The Ellipta® inhaler is activated by pulling the cap all the way down until you here a click.	One Two Three Four Five Other: _____
<b>23.</b> How frequently do you inhale your COPD medication using the Ellipta® inhaler?	Once a day in the morning Once a day in the evening Twice a day (once in the morning, once in the evening) Other: _____
<b>24.</b> How many times do you actually activate the Ellipta® inhaler before inhaling the medication (independently of what you were advised)? Again, the Ellipta® inhaler is activated by pulling the cap all the way down until you hear a click. Please base your answer on the number of activations each time you are using the Ellipta® inhaler.	One Two Three Four Five Other: _____
<b>If using Genuair® inhaler</b>	
<b>25.</b> How many times have you been advised to press the activation button of the Genuair® Inhaler before inhaling the medication in order to take one full dose? The activation button is the green button at the rear of the inhaler.	One Two Three Four Five Other: _____
<b>26.</b> How frequently do you inhale your COPD medication using the Genuair® inhaler?	Once a day in the morning Once a day in the evening Twice a day (once in the morning, once in the evening) Other

<p><b>27.</b> How many times do you actually press the activation button of the Genuair® Inhaler before inhaling the medication (independently of what you have been advised) before inhaling your COPD medication? Again, the activation button is the green button at the rear of the inhaler. Please base your answer on the number of activations each time you are using the Genuair® inhaler.</p>	<p>One Two Three Four Five Other: _____</p>
<p><b>All respondents</b></p>	
<p><b>28.</b> Honestly speaking, in the last 30 days, how many times did you not take – for any reason - your COPD medication as advised?</p>	<p>Never Once Twice to 5 times 6 to 10 times 11 to 15 times More than 15 times</p>
<p><b>Second and third inhaler users (if applicable)</b></p>	
<p><b>29.</b> Next I want to understand how you would rate various aspects of the inhaler (if any) you are currently using. This is the [specific inhaler] inhaler.</p>	<p>Very difficult to use Somewhat difficult to use Neither difficult nor easy Somewhat easy Very easy Please explain _____</p>
<p><b>30.</b> How would you describe the way you inhale when using the [specific inhaler] second (if any) inhaler?</p>	<p>Slow and deep Rapid and deep Rapid and shallow I don't know / I don't remember Please explain _____</p>
<p><b>31.</b> Do you exhale out before you inhale the drug using the [specific inhaler] inhaler?</p>	<p>Yes No I don't know / I don't remember</p>

<p><b>32.</b> How confident are you in knowing that you have inhaled a full dose from the [specific inhaler] inhaler?</p>	<p>Very low confidence in knowing when I <u>have taken</u> a full dose</p> <p>Low confidence in knowing when I <u>have taken</u> a full dose</p> <p>Neither high nor low confidence</p> <p>Confident that I <u>have taken</u> a full dose</p> <p>Very confident that I <u>have taken</u> a full dose</p> <p>Please explain _____</p>
<p><b>33.</b> How often do you feel you may not have inhaled a full dose from the [specific inhaler] inhaler?</p>	<p>I often feel like I've not had a full dose</p> <p>I sometimes feel like I have not had a full dose</p> <p>I rarely feel like I have not had a full dose</p> <p>I never feel like I have not had a full dose</p> <p>Please explain _____</p>
<p><b>34.</b> When you think you feel you have not inhaled a full dose from the [specific inhaler] inhaler, what do you typically do?</p>	<p>I do nothing and just wait and see</p> <p>Inhale again without reactivating or reloading the device</p> <p>Inhale another dose at the same time</p> <p>Inhale another dose later</p> <p>Use a rescue inhaler</p> <p>Other – please specify: _____</p>
<p><b>All respondents</b></p>	
<p><b>35.</b> When was the last time your doctor, nurse or pharmacist checked whether you were using your inhaler(s) correctly.</p>	<p>In the last 6 months</p> <p>In the last year</p> <p>In the last 2 years</p> <p>More than 2 years ago</p> <p>Never</p> <p>I can't remember</p>

<p><b>36.</b> Who was it that checked you were using your inhaler(s) correctly?</p>	<p>General Practitioner Pulmonologist Nurse Pharmacist Other – please specify: _____</p>
<p><b>37.</b> Did you ever receive any training on how to use your inhaler(s)?</p>	<p>Yes No Please explain _____</p>
<p><b>If trained</b></p>	
<p><b>38.</b> Who trained you?</p>	<p>General Practitioner Pulmonologist Nurse Pharmacist Other – please specify: _____</p>
<p><b>39.</b> Were you trained to use all inhalers by the same person at the same time?</p>	<p>Yes No</p>
<p><b>40.</b> How did they train you? What information or materials did they give to you to read or look at?</p>	<p>Leaflet Instructions for use (IFU) Video Demonstration</p>
<p><b>41.</b> How helpful did you find the different materials?</p>	<p>Very unhelpful Somewhat unhelpful Neither helpful nor unhelpful Somewhat helpful Very helpful</p>
<p><b>42.</b> Do you use the instructions for use (IFU)?</p>	<p>Yes No Please explain _____</p>



43. If you had a question about how to use your inhaler, what would you do to get an answer?	Please explain _____
<b>End of survey</b>	

**Figure S1:** Device training.

