# Appendix
## Five case scenarios and responses from the study participants (n=201)

| | Questions and choice options (*Correct answers are shaded*) | Response n | (%) |
|---|---|---|---|
| **Case 1A** | **A 40-year-old male non-smoker, with a FEV1 of 85% predicted, uses an inhaled SABA daily for symptoms, and has no nocturnal symptoms or restriction to social or physical activities. This patient would be classified as:** | | |
| | a) Controlled asthma | 110 | 54.7 |
| | b) Partly-controlled asthma | 43 | 21.4 |
| | c) Uncontrolled asthma | 6 | 3.0 |
| | d) Unknown | 39 | 19.4 |
| | ***Correct answer*** | | ***21.4*** |
| **1B** | **If the above patient has been taking no other medication than his as-needed inhaled SABA, what treatment adjustment will you consider for him?** | | |
| | a) No change in treatment | 80 | 39.8 |
| | b) Change as-needed inhaled SABA to scheduled use | 24 | 11.9 |
| | c) Add oral ß2 agonist | 8 | 4.0 |
| | d) Add theophylline | 15 | 7.5 |
| | e) Add anti-leukotriene (such as montelukast) | 16 | 8.0 |
| | f) Add oral steroid | 7 | 3.5 |
| | g) Add low-dose ICS | 62 | 30.8 |
| | h) Add medium to high-dose ICS | 5 | 2.5 |
| | i) Add combination of ICS/LABA | 20 | 10.0 |
| | k) Add inhaled anticholinergic drugs | 4 | 2.0 |
| | l) Apply SMART strategy | 8 | 4.0 |
| | m) Other drugs | 14 | 7.0 |
| | n) Unknown | 0 | 0.0 |
| | ***Correct answer*** | | ***22.4*** |
| **1C** | **If the above patient has already been taking low-dose ICS, in addition to his as-needed inhaled SABA, what treatment adjustment will you consider for him?** | | |
| | a) No change in treatment | 62 | 30.8 |
| | b) Change as-needed inhaled SABA to scheduled use | 38 | 18.9 |
| | c) Add oral ß2 agonist | 15 | 7.5 |
| | d) Add theophylline | 8 | 4.0 |
| | e) Add anti-leukotriene (such as montelukast) | 20 | 10.0 |
| | f) Add oral steroid | 8 | 4.0 |
| | g) Double the dose of ICS | 10 | 5.0 |

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| | h) Change ICS alone to combination of ICS/LABA | 56 | 27.9 |
| | j) Add inhaled anticholinergic drugs | 7 | 3.5 |
| | k) Apply SMART strategy | 7 | 3.5 |
| | l) Other drugs | 0 | 0.0 |
| | m) Unknown | 6 | 3.0 |
| | ***Correct answer*** | | ***28.9*** |

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| **Case 2A** | **A 50-year-old smoker, with a FEV1 of 85% predicted, has symptoms at least thrice a week which require SABA and often require her to stop her activities, and has nocturnal symptoms at least once a week. This patient would be classified as:** | | |
| | a) Controlled asthma | 18 | 9.0 |
| | b) Partly-controlled asthma | 71 | 35.3 |
| | c) Uncontrolled asthma | 77 | 38.3 |
| | d) Unknown | 33 | 16.4 |
| | ***Correct answer*** | | ***33.8*** |
| **2B** | **If the above patient has been taking no other medication than her as-needed inhaled SABA, what treatment adjustment will you consider for her?** | | |
| | a) No change in treatment | 6 | 3.0 |
| | b) Change as-needed inhaled SABA to scheduled use | 32 | 15.9 |
| | c) Add oral ß2 agonist | 23 | 11.4 |
| | d) Add theophylline | 29 | 14.4 |
| | e) Add anti-leukotriene (such as montelukast) | 20 | 10.0 |
| | f) Add oral steroid | 21 | 10.4 |
| | g) Add low-dose ICS | 63 | 31.3 |
| | h) Add medium to high-dose ICS | 39 | 19.4 |
| | i) Add combination of ICS/LABA | 56 | 27.9 |
| | k) Add inhaled anticholinergic drugs | 11 | 5.5 |
| | l) Apply SMART strategy | 4 | 2.0 |
| | m) Other drugs | 2 | 1.0 |
| | n) Unknown | 1 | 0.5 |
| | ***Correct answer*** | | ***50.7*** |
| **2C** | **If the above patient has already been taking low-dose ICS, in addition to her as-needed inhaled SABA, what treatment adjustment will you consider for her?** | | |
| | a) No change in treatment | 11 | 5.5 |
| | b) Change as-needed inhaled SABA to scheduled use | 39 | 19.4 |
| | c) Add oral ß2 agonist | 16 | 8.0 |
| | d) Add theophylline | 3 | 1.5 |
| | e) Add anti-leukotriene (such as montelukast) | 19 | 9.5 |
| | f) Add oral steroid | 4 | 2.0 |

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| | g) Double the dose of ICS | 38 | 18.9 |
| | h) Change ICS alone to combination of ICS/LABA | 94 | 46.8 |
| | j) Add inhaled anticholinergic drugs | 5 | 2.5 |
| | k) Apply SMART strategy | 3 | 1.5 |
| | l) Other drugs | 1 | 0.5 |
| | m) Unknown | 8 | 4.0 |
| | ***Correct answer*** | | ***48.3*** |
| **2D** | **If the above patient has already been taking combination therapy with ICS and LABA, in addition to her as-needed inhaled short-acting ß2 agonist, what treatment adjustment will you consider for her?** | | |
| | a) No change in treatment | 28 | 13.9 |
| | b) Change as-needed inhaled SABA to scheduled use | 24 | 11.9 |
| | c) Add oral ß2 agonist | 12 | 6.0 |
| | d) Add theophylline | 26 | 12.9 |
| | e) Add anti-leukotriene (such as montelukast) | 23 | 11.4 |
| | f) Add oral steroid | 33 | 16.4 |
| | g) Increase the dose of existing ICS/LABA | 76 | 37.8 |
| | i) Add inhaled anticholinergic drugs | 17 | 8.5 |
| | j) Apply SMART strategy | 8 | 4.0 |
| | k) Other drugs | 3 | 1.5 |
| | l) Unknown | 4 | 2.0 |
| | ***Correct answer*** | | ***21.4*** |
| **Case 3A** | **A 40-year-old woman with non-smoker experienced twice or less of daytime asthma symptoms per week in the past 3 months. He also had no nocturnal symptoms and limitations of activities. He used the as-needed inhaled SABA for less than 2 times a week and her FEV1 was 85% predicted. This patient would be classified as:** | | |
| | a) Controlled asthma | 84 | 41.8 |
| | b) Partly-controlled asthma | 56 | 27.9 |
| | c) Uncontrolled asthma | 21 | 10.4 |
| | d) Unknown | 34 | 16.9 |
| | ***Correct answer*** | | ***41.8*** |
| **3B** | **If the above patient has already been taking low-dose ICS, in addition to his as-needed inhaled SABA, what treatment adjustment will you consider for him?** | | |
| | a) No change in treatment | 50 | 24.9 |
| | b) Stop ICS | 9 | 4.5 |
| | c) Reduce to a half of ICS dose | 9 | 4.5 |
| | d) Add theophylline | 5 | 2.5 |

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|---|---|---|---|
| | e) Add anti-leukotriene (such as montelukast) | 26 | 12.9 |
| | f) Double the dose of ICS | 38 | 18.9 |
| | g) Change ICS alone to combination of ICS/LABA | 61 | 30.3 |
| | h) Anti-IgE injection | 16 | 8.0 |
| | i) Apply SMART strategy | 5 | 2.5 |
| | j) Other drugs | 4 | 2.0 |
| | k) Unknown | 2 | 1.0 |
| | ***Correct answer*** | | ***23.4*** |
| **3C** | **If the above patient has already been taking combination therapy of a medium dose of ICS and LABA, in addition to his as-needed inhaled SABA what treatment adjustment will you consider for him?** | | |
| | a) No change in treatment | 37 | 18.4 |
| | b) Stop combination of ICS/LABA | 10 | 5.0 |
| | c) Stop ICS and keep LABA | 2 | 1.0 |
| | d) Stop LABA and keep ICS | 12 | 6.0 |
| | e) Reduce to half of ICS dose and keep LABA | 27 | 13.4 |
| | f) Add anti-leukotriene (such as montelukast) | 25 | 12.4 |
| | g) Increase dose of combination ICS/LABA | 62 | 30.8 |
| | i) Apply SMART strategy | 18 | 9.0 |
| | j) Other drugs | 5 | 2.5 |
| | k) Unknown | 8 | 4.0 |
| | ***Correct answer*** | | ***25.9*** |
| **Case 4 A** | **An 8-year-old boy has symptoms at least thrice a week. He often requires stopping his physical activities (like running) due to asthma symptoms. He also has nocturnal symptoms at least once a week. His FEV1 was 84%. This patient would be classified as:** | | |
| | a) Controlled asthma | 18 | 9.0 |
| | b) Partly-controlled asthma | 51 | 25.4 |
| | c) Uncontrolled asthma | 83 | 41.3 |
| | d) Unknown | 47 | 23.4 |
| | ***Correct answer*** | | ***41.3*** |
| **4B** | **If the above patient has been taking no other medication than his as-needed inhaled SABA, what treatment adjustment will you consider for him?** | | |
| | a) No change in treatment | 13 | 6.5 |
| | b) Change as-needed inhaled SABA to scheduled use | 28 | 13.9 |
| | c) Add oral ß2 agonist | 15 | 7.5 |
| | d) Add theophylline | 17 | 8.5 |
| | e) Add anti-leukotriene (such as montelukast) | 16 | 8.0 |

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|---|---|---|---|
| | f) Add oral steroid | 15 | 7.5 |
| | g) Add low dose ICS | 84 | 41.8 |
| | h) Add medium to high-dose ICS | 19 | 9.5 |
| | i) Add combination of ICS/LABA | 29 | 14.4 |
| | k) Add inhaled anticholinergic drugs | 3 | 1.5 |
| | l) Apply SMART strategy | 6 | 3.0 |
| | m) Other drugs | 12 | 6.0 |
| | n) Unknown | 5 | 2.5 |
| | ***Correct answer*** | | ***52.7*** |
| **Case 5 A** | **A 30-year-old pregnant lady at 22 weeks of gestation, uses an inhaled SABA daily for symptoms, and has no nocturnal symptoms or restriction to social or physical activities. Her FEV1 is 82% predicted, this patient would be classified as:** | | |
| | a) Controlled asthma | 103 | 51.2 |
| | b) Partly-controlled asthma | 40 | 19.9 |
| | c) Uncontrolled asthma | 16 | 8.0 |
| | d) Unknown | 38 | 18.9 |
| | ***Correct answer*** | | ***19.9*** |
| **5B** | **If the above patient has already been taking low-dose ICS, in addition to his as-needed inhaled SABA, what treatment adjustment will you consider for her?** | | |
| | a) No change in treatment | 86 | 42.8 |
| | b) Change as-needed inhaled SABA to scheduled use | 25 | 12.4 |
| | c) Add oral ß2 agonist | 5 | 2.5 |
| | d) Add theophylline | 9 | 4.5 |
| | e) Add anti-leukotriene (such as montelukast) | 7 | 3.5 |
| | f) Add oral steroid | 3 | 1.5 |
| | g) Add low-dose ICS | 11 | 5.5 |
| | h) Add medium to high-dose ICS | 16 | 8.0 |
| | i) Add combination of ICS/LABA | 22 | 10.9 |
| | k) Add inhaled anticholinergic drugs | 1 | 0.5 |
| | l) Apply SMART strategy | 2 | 1.0 |
| | m) Other drugs | 3 | 1.5 |
| | n) Unknown | 4 | 2.0 |
| | ***Correct answer*** | | ***11.9*** |

SABA=short-acting beta agonist; LABA=long-acting beta agonist; ICS=inhaled corticosteroid