Appendix 1. Survey questions for the awareness of asthma guideline

1. Questions on knowledge regarding asthma guideline

Choose the option whether each of the following statements is correct or incorrect.

1-1 The clinical course of asthma is typically characterized by recurrent episodes of shortness of breath, wheeze, cough and chest tightness.

- □ Correct
- □ Incorrect
- □ Don’t know

1-2 The prolonged (10 days or more) clinical courses accompanied by periodic worsening of respiratory symptoms after colds or flu suggest a diagnosis of asthma.

- □ Correct
- □ Incorrect
- □ Don’t know

1-3 Wheezing episodes in asthma can worsen at night, especially at the time of inspiration.

- □ Correct
- □ Incorrect
- □ Don’t know

1-4 Asthma is confirmed by allergy skin prick test or measuring the level of specific serum immunoglobulin.

- □ Correct
- □ Incorrect
- □ Don’t know

1-5. Bronchodilator responsiveness is defined as over 12% increase of FEV1 and 200 ml.

- □ Correct
- □ Incorrect
- □ Don’t know

1-6. Asthma is a chronic inflammatory airway disease and requires steady and ongoing care.
1-7. For the proper management of asthma, it is necessary to classify asthma according to its severity and to determine its status.

□ Correct          □ Incorrect          □ Don’t know

1-8. Asthma is defined as uncontrolled if patients report night-time respiratory symptoms or limited activities.

□ Correct          □ Incorrect          □ Don’t know

1-9. Any exacerbation of asthma should be promptly reviewed whether current of maintenance treatment is adequate.

□ Correct          □ Incorrect          □ Don’t know

1-10. The treatment step should be adjusted up until total asthma control was achieved if patients have persistent symptoms.

□ Correct          □ Incorrect          □ Don’t know

1-11. Stepping down treatment should be promptly considered if patients have controlled asthma.

□ Correct          □ Incorrect          □ Don’t know

1-12. Long-acting beta2-agonist inhalation alone can be used for asthma patients as a reliever medication.

□ Correct          □ Incorrect          □ Don’t know
1-13. Medium or high dose ICS/LABA may be appropriate for initial treatment for some patients with persistent symptoms.

☐ Correct ☐ Incorrect ☐ Don’t know

1-14. Short-acting beta2-agonists are highly recommended to relieve acute asthma symptoms, and anticholinergic bronchodilators may be used.

☐ Correct ☐ Incorrect ☐ Don’t know

1-15. The current recommendation is to double or quadruple the ICS dose if asthma remains uncontrolled with low dose ICS treatment alone.

☐ Correct ☐ Incorrect ☐ Don’t know

1-16. Anti-immunoglobulin E (anti-IgE) treatment is suggested for patients with moderate to severe asthma.

☐ Correct ☐ Incorrect ☐ Don’t know

1-17. Long-term use of high dose inhaled corticosteroid (budesonide) at 800-1600ug/day can increase the risk of glucocorticoid-induced osteoporosis.

☐ Correct ☐ Incorrect ☐ Don’t know

1-18. Patients with severe asthma exacerbation require systemic corticosteroids in early stage of treatment.

☐ Correct ☐ Incorrect ☐ Don’t know
1-19. Concomitant administration of combined inhalation with short-acting beta2-agonists and anticholinergic bronchodilators may yield enhanced responsiveness in acute asthma exacerbation.

□ Correct □ Incorrect □ Don’t know

1-20. Sedative agent can be used for the patients in acute asthma exacerbations.

□ Correct □ Incorrect □ Don’t know

2. **Questions on attitude regarding asthma guideline**

Choose your level of agreement with each of the following statements.

2-1. Asthma is a chronic inflammatory disease of the airways.

1) Strongly agree  2) Somewhat agree  3) Somewhat disagree  4) Strongly disagree

2-2. Asthma is an allergic disease, often accompanied by allergic rhinitis, and evaluation and treatment of allergic rhinitis are essential for the improvement of asthma symptoms.

1) Strongly agree  2) Somewhat agree  3) Somewhat disagree  4) Strongly disagree

2-3. Positive bronchodilator reversibility or metacholine bronchial challenge test are required to confirm although the diagnosis of asthma can be made by identifying a characteristic pattern of respiratory symptoms such as wheezing, shortness of breath, chest tightness or
cough.

2-4. Most asthmatic patients with appropriate management can be expected to have normal life with minimal or no symptoms.

2-5. Inhaled corticosteroids are the most effective drugs for long-term control of asthma.

2-6. Oral medications generally have better efficacy with fewer side effects than inhaled medications for treatment of asthmatic patients.

2-7. Asthma known as a chronic disease requires long-term management and follow-up.
2-8. The symptoms of asthma are often exacerbated by allergen or irritant exposure, respiratory viral infections, air pollutants and drugs, and avoiding exposure to these risk factors can improve symptom control as well as dosage adjustment of medications in asthmatic patients.

1) Strongly agree 2) Somewhat agree 3) Somewhat disagree 4) Strongly disagree

2-9. The minimum dose of medications should be used during pregnancy with general concern about risk of fetal complications.

1) Strongly agree 2) Somewhat agree 3) Somewhat disagree 4) Strongly disagree

2-10. Acute exacerbations of asthma are commonly caused by short exposure of risk factors, and treatment can be discontinued if acute symptoms are controlled.

1) Strongly agree 2) Somewhat agree 3) Somewhat disagree 4) Strongly disagree

III. Questions on practice regarding asthma guideline

Choose among the answer options for each of the following statements.
3-1. How often do you prescribe inhaled corticosteroids to control persistent asthmatic symptoms?

1) Very often  2) Often  3) Sometimes  4) Never

3-2. How often do you assess the degree of severity and treatment plan of your asthma patient based on their symptoms and lung functions?

1) Very often  2) Often  3) Sometimes  4) Never

3-3. How often do you evaluate and treat allergic rhinitis in patients with asthma?

1) Very often  2) Often  3) Sometimes  4) Never

3-4. How often do you prescribe both a controller and reliever medication, and explain to use the controller and reliever separately?

1) Very often  2) Often  3) Sometimes  4) Never

3-5. How often do you explain your patients how to use the inhaler when you prescribe inhalers?
1) Very often
2) Often
3) Sometimes
4) Never