1) MRI is useful in staging a patient with lung cancer?
   A) When there is concern for involvement of the superior sulcus or brachial plexus involvement
   B) When restaging of the mediastinum after neoadjuvant treatment
   C) When there is concern for involvement of lung parenchyma
   D) When surrenal glands are to be detected
   E) When contralateral lung has a suspicious solitary nodule

2) Which one of the following options you recommend to a patient with resected stage II and IIIA NSCLC?
   a) Adjuvant radiotherapy
   b) Adjuvant chemotherapy
   c) Adjuvant chemoradiotherapy
   d) No adjuvant therapy.

3) Which of the followings has not been changed in the new TNM staging system for lung cancer?
   A) T1
   B) T2
   C) N1
   D) T4
   E) M

4) In what situations pulmonary fungal infections not typically found?
   A) Solitary pulmonary nodules
   B) Organ transplant programs,
   C) HIV positive patient with CD4 counts <200
   D) Patients with complications of tuberculosis carcinoma.

5) Which is NOT true for mediastinal goitre?
   A) Most of the lesions can be resected via collar incision
   B) Goitre is seen in only in anterior or middle mediastinum
   C) Calcification is a common sign of mediastinal goitre
   D) Vena cava superior syndrome is rare
   E) Hypocalcemia may develop after the operation

6) Which is true regarding the medical errors?
   A) The majority of cases amount from negligence or misconduct
   B) It is a system problem, not a personal problem
   C) Blaming the doctor who made an error would solve the problem in most cases
   D) Cardiothoracic surgeons have the lowest inadvertent events when compared to other specialties

7) A 2-cm chest wall tumour in a patient with no known primary tumour elsewhere can be diagnosed best by
   A) Needle biopsy
   B) Excisional biopsy
   C) Incisional biopsy
   D) MRI
   E) PET scan

8) For which liver hydatid cyst a thoracic surgeon (TS) is asked to operate?
   A) Every liver hydatid cyst can be operated by a TS
   B) Only those cysts that locate the lower liver surface
   C) Cysts located on the dome of the liver
   D) Every lung cyst associated with liver cyst should be operated by a TS
   E) A TS should not operate any patient with liver cyst

9) What is the ideal treatment of malignant pleural mesothelioma (MPM)
   A) Extrapleural pneumonectomy plus CT/RT
   B) Pleurectomy-Decortications plus adjuvant treatment
   C) Pleurectomy only
   D) CT and or RT
   E) There has been no ideal treatment found for MPM
10) Which of the situations define the T2 status according to IMIG staging system in MPM?  
A) Parietal pleura invasion  
B) Visceral pleura invasion  
C) Lung parenchyma invasion  
D) Pericardium invasion  
E) Lobar bronchus invasion  

11) Regarding the chest wall tumors?  
A) Malignant tumors are more frequent than the benign tumors  
B) Female and male are affected equally  
C) Radiation is the main cause  
D) All chest wall defects after resection should be closed by mesh  
E) Leiomyosarcoma is the most frequent rib tumor  

12) Which of the following approach is appropriate for the tumors located at the thoracic inlet?  
A) Thoracotomy  
B) Cervical incision  
C) Cervical incision plus upper sternotomy  
D) Cervical incision plus VATS  
E) All of the above can be used  

13) Which statement is correct regarding tuberculosis?  
A. Lung surgery is frequently indicated for active tuberculosis  
B. There is a correlation between lung cancer and previous tuberculosis  
C. The presence of HIV precludes you for surgery for tuberculosis  
D. Drug resistance for pulmonary tuberculosis is exclusively a ‘3rd world’ disease  

14) Mortality after intracavitary bullae drainage is particularly high in patients with FEV1:  
A) Less than 800ml  
B) Less than 700ml  
C) Less than 500ml  
D) Less than 400ml  

15) What is the most likely cause of cardiac arrest shortly after intubating and ventilating a patient with severe emphysema?  
A) Misplacement of the double lumen tube  
B) Poor gas exchange  
C) Cardiac comorbidity  
D) Air trapping leading to overexpansion and decreased venous return  

16) What is the most common cause of failure of the lung to collapse after double lumen intubation  
A) Bronchial balloon herniation  
B) Tube placed too proximally  
C) Tube placed into the wrong side  
D) Tube placed too far distally into the bronchus  

17) A strong risk factor for malignancy in a SPN is  
A. Presence of calcium deposits in the lesion  
B. Calculated doubling time of less than 30 days  
C. A SUV of less than 2.5 on PET scan  
D. A speculated border on CT scan  

18) Most giant hiatal hernia patients should be treated by:  
A) Reassurance without operation  
B) Operation only in extreme situations  
C) Elective operation if fit  
D) Gastropexy
19) Measurement of DLCO preoperatively:
   A) Is mandatory in all patients prior to lung resection
   B) Gives additional risk information even in patients with FEV1>80% predicted
   C) Is only necessary in the most borderline patients
   D) Is decreasing in thoracic surgical practice in Europe

20) Calculated ppoFEV1 using the counting of segments method:
   A. Is the most accurate way of assessing postoperative spirometry
   B. Was developed in the 1970s
   C. May significantly underestimate ppoFEV1 in patients with COPD
   D. Accurately estimated ppoFEV1 in patients with COPD

21) Stereotactic radiosurgery:
   A. Has been shown to have similar outcomes for lobectomy for Stage I NSCLC
   B. Has challenged lobectomy by showing similar survival figures for early stage disease but failed to take account of nodal disease
   C. Is the treatment of choice for metastatic disease
   D. Is not affected by respiratory excursion

22) In N2 (single node) disease, what is the best treatment option?
   a) Surgery
   b) Preoperative chemotherapy followed by surgery
   c) Surgery followed by adjuvant chemotherapy
   d) Concomitant chemoradiotherapy without any surgical approach
   e) b and c

23) The five year survival in most series following resection of solitary adrenal metastasis from early stage NSCLC:
   A. Is 15%
   B. Is 20-25%
   C. Is less than 5% for synchronous metastasis rather than metastasis
   D. Is prohibitively low to consider surgery

24) Patients who undergo surgery for solitary brain metastasis in NSCLC:
   A. Should also have whole brain radiotherapy
   B. Should have undergone mediastinoscopy to exclude N2 disease
   C. Should undergo adjuvant chemotherapy to control microscopic metastatic disease
   D. All of the above

25) The most difficult decision regarding palliative treatment of tracheobronchial obstruction is:
   A. To define the risk for a borderline patients who could be made comfortable
   B. To choose whether or not to stent
   C. To decide on whether CT is appropriate or not
   D. None of the above.

26) In the event of exsanguinating haemorrhage from an airway lesion during rigid bronchoscopy, the most efficient way of stopping the haemorrhage is:
   A. Cryotherapy  B) Laser therapy  C) Platelet transfusion  D) Inflation of a Fogarty embolectomy catheter in the bronchus.

27) Risk modelling:
   A. Is essential for comparing outcomes between surgeons and units
   B. Involves individual surgeons being prepared to contribute data
   C. Is an important means of protecting borderline patients from being refused surgery
   D. All of the above
   E. None of the above
28) Which is the initial treatment of first primary spontaneous pneumothorax
   a) Simple aspiration or small-bore chest tube if dyspnea or complete pneumothorax is present.
   b) Simple aspiration or small-bore chest tube if less than 10%
   c) Always videothoracoscopy
   d) Chest drain and talc poudrage

29) Minimally invasive oesophagectomy:
   A. Is an accepted standard treatment for resectable oesophageal cancer
   B. Has an equivalent outcome to open surgery in terms of complications
   C. Reveals low volume metastatic disease in 5-10% of properly staged patients
   D. Takes the same time as open surgery

30) The gastric tube:
   A. Is probably best constructed with an extracorporeal technique
   B. Is probably best constructed with an intracorporeal technique
   C. Is easily passed up the mediastinum laparoscopically
   D. Does not need suturing to the crus to prevent herniation of other viscera

31) Regarding surgical mistakes:
   A. Human error is the norm
   B. Human error can be trained out of skilled technicians with practice
   C. Human error must be punished
   D. Human error must not be talked about or expected in surgery

32) When to send to surgery in primary pneumothorax?
   a) a second ipsilateral pneumothorax
   b) first contralateral or simultaneous bilateral pneumothorax
   c) first episode of tension pneumothorax
   d) significant spontaneous hemothorax
   e) a high risk profession or activity
   f) all of them

33) Please connect the 3 items related to the presence of Aspergillus in the chest:
   A) saphrophytic     B) allergic     C) opportunistic
   x) bronchopulmonary aspergillosis  y) aspergilloma  z) invasive aspergillosis

34) According to the International Registry, the current survival after lung transplantation approximates x %
    after 5 years:
   A) 75%
   B) 65%
   C) 55%
   D) 45%

35) The objectives of Lung Cancer Screening are
   a) Resection of potentially curable lung ca.
   b) Minimize resection of benign nodules.
   c) Increase overall survival
   d) Reduce costs in lung cancer treatment
   e) a, b and c

36) The NETT found that the subgroup of patients with Upper Lobe predominant emphysema and low exercise capacity did the best
   A) True  B) False
37) Airway bypass involves making a hole through the bronchial wall (transbronchial fenestration) so as to allow communication between the airway and the emphysematous lungs  
A) True  B) False

38) Airway bypass takes advantage of collateral ventilation  
A) True  B) False

39) Increased levels of β-HCG and/or α-FP are specific for the following mediastinal tumor:  
A) neurogenic  B) thymic  C) lymphoma  D) germ cell

40) Increased levels of NSE are specific for the following mediastinal tumor:  
A) neurogenic  B) thymic  C) neuroendocrine  D) germ cell

41) Serum AChR antibodies determination in the diagnosis of myasthenia gravis (MG)  
A) cannot be falsely positive  
B) excludes MG with negative test  
C) is sole antibody test in MG patients  
D) is the best diagnostic test  
E) may be falsely negative

42) Thymectomy in treatment of myasthenia gravis (MG)  
A) is document beneficial by phase III studies  
B) requires complete thymic removal for benefit  
C) is absolutely indicated with associated thymoma  
D) has proven superiority to medical therapy for MG crisis  
E) is indicated for ocular MG only if performed by MIS techniques

43) In esophageal cancer number of regional lymph node metastases  
A) carries a different prognosis depending on histopathologic cell type  
B) has historically been included in definition of N classification  
C) in combination with histologic grade predicts survival  
D) is independent of T classification  
E) is inversely associated with survival

44) Modalities necessary in clinical staging of esophageal cancer include  
A) Endoscopic esophageal ultrasound  
B) Endoscopic esophageal ultrasound directed fine needle aspiration  
C) Esophagoscopy and biopsy  
D) FDG-PET  
E) All of the above

45) In the follow-up of curatively resected NSCLC  
A) Annual FDG PET scanning is mandatory.  
B) Blood tests reliably identify early recurrence.  
C) Chest radiographs are the best radiographic.  
D) Guidelines are well established.  
E) Lead time may account for reported survival differences.

46) A right middle lobe NSCLC is detected during follow-up of an asymptomatic patient who had a curative resection of a Stage IB adenocarcinoma of the right upper lobe 36 months ago. Resection of this NSCLC is  
A) associated with a 5-year survival similar to the previously resected cancer  
B) best accomplished using minimally invasive techniques  
C) likely to be curative  
D) possibly treating a second primary lung cancer  
E) unlikely to followed by distant metastases
47) An atypical carcinoid tumor of the lung is diagnosed by
A) histologic review of the resected tumor
B) history and physical examination
C) FDG PET scanning
D) presence of regional lymph node metastases (pN1)
E) serum markers

48) A granular cell tumor of the esophagus
A) arises from the 4th ultrasound layer of the esophagus
B) has a high incidence of malignancy and distant metastases
C) is diagnosed by esophagoscopy and biopsy
D) is S-100 positive and thus derived from cell of the neural crest
E) originates from cells of cajal

49) A typical symptoms of gastroesophageal reflux disease is
A) abdominal bloating  B) asthma  C) cough  D) laryngitis  E) regurgitation

50) A predictor of good outcome following antireflux surgery is
A) abnormal 24-hr pH monitoring
B) atypical symptoms
C) no symptom response to proton pump inhibitor (PPI) medication
D) presence of Barrett esophagus
E) short esophagus

51) The most frequently read part of a scientific publication is
A) abstract  B) discussion  C) introduction  D) methods  E) title

52) Which modality of radiotherapy was shown to have the longest survival in the management of lung cancer?
  a. Concurrent chemoradiotreatment
  b. Sequential chemoradiotreatment
  c. HPF aks Radiotherapy
  d. HPF radiotherapy
  e. Radical radiotherapy

53) The referent value sensitivity is
  A) accuracy of test divided by true positive patients
  B) defined as number of patients correctly identified with disease divided by all patients with disease
  C) defined as number of patients with disease compared to all patients with a positive test
  D) useful in determining the value of a negative test
  E) useful for individual patient decisions

54) Bias may be introduced on the evaluation of a test if
A) all patients undergoing the test don’t have confirmation by gold standard
B) negative pre-testing excludes patients from the test
C) only patients of referring specialists and not family doctors are offered the test
D) patients without health care are excluded from the test
E) all of the above

55) Achalasia is diagnosed by
A) barium esophagram
B) esophageal manometry
C) gastric emptying time
D) history and physical examination
E) 24-hr pH monitoring
56) Heller myotomy and Dor fundoplication in the treatment of achalasia is
A) Curative B) definitive C) indicated to prevent cancer D) palliative E) reparative

57) Complications following esophagectomy for esophageal cancer are
A) associated with decreased survival B) over reported C) reported using accepted guidelines D) the result of technical errors of resection E) well defined

58) The following are early complications associated with GI reconstruction during esophagectomy
A) aortic laceration B) chylothorax C) gastric necrosis D) recurrent nerve palsy E) tracheal laceration

59) Which of the following technique is used less commonly in surgical treatment of pulmonary hydatid cysts?
A) Lobectomy B) Aspiration of the cyst C) Enucleation D) All three techniques are used equally

60) Which statement is correct about Diaphragm Trauma;
A. Diaphragmatic injuries are frequently missed B. Left sided injuries are more lethal C. Endoscopy is pivotal to diagnosis D. Peripheral diaphragmatic injuries are most common

61) Which statement is true about blunt diaphragmatic injury;
A. Right sided rupture is more common B. The colon is the most common herniated viscus C. Aortic rupture is frequently associates D. Rib fractures are often seen

62) Which statement is wrong regarding the diagnostic assessment of a tracheal injury:
A. the majority of injuries present with abnormal radiology B. It is best is to evaluate the injury with a CT scan C. possible associated injuries should be excluded in the diagnostic work up D. bronchoscopy gives the best information about location and extent of the injury

63) Which statement is correct about airway injuries?
A. All iatrogenic injuries can be treated conservatively B. Most injuries to the main bronchi can be treated conservatively C. Small Injuries to the anterior cervical trachea close with a conservative approach D. Through and through stab wounds in the cervical trachea in general can be treated conservatively

64. What is not a common cause of bronchiectasis?
A. Childhood infection( whooping cough, measles) B. Tuberculosis C. Overlooked foreign body inhalation D. Trauma E. Cystic fibrosis

65. Which statement about empyema is true
A. Anaerobes are commonly culture in post traumatic empyema B. Tuberculosis related effusions often culture gram negative organisms C. Staphylococcus is a frequent pathogen in the debilitated patient D. Drainage in peripneumonic effusions is always indicated
66. What would not be a general indication of drainage or surgery in a parapneumonic effusion
A. Frank purulent or turbid/cloudy pleural fluid
B. The presence of organisms identified by Gram stain or culture from non-purulent pleural fluid
C. pH of aspirate =7.4
D. Multiple loculation with air-fluid levels on CT scan

67. Which is incorrect about oesophageal injury?
A. It is common in stab wounds to the back
B. It is uncommon with routine flexible gastroscopy
C. It may present with surgical emphysema in the neck
D. It should be suspected of heavy vomiting followed by chest pain

68. Which is not a common presentation of Aspergillus infections
A. Saprophytic (aspergilloma)
B. Allergic (Non-invasive bronchil)
C. Mediastinal (Sclerosing)
D. Invasive Aspergillosis (opportunistic)

69. Which statement is true for penetrating chest injuries
A. ‘Bullet proof’ vests are highly effective for all forms of firearms
B. A very important factor in shotgun wounds is the distance from the weapon
C. Military weapons and hunting rifles use the same munitions
D. The lung is less tolerant of high velocity wounds than soft tissue or liver

70. Which statement is false for penetrating chest injuries
A. Oversewing of the visceral pleura of lung wounds is sufficient for most penetrating wounds
B. Air embolism is an important factor in the morbidity of lung injuries
C. High velocity wounds can injure organs without penetrating them
D. The incidence of gunshot wounds parallels the incidence of ownership in the general population

71. Variables for a Bayesian probability analysis in SPN evaluation do not typically include
A. Lung perfusion scan
B. Smoking history
C. Geographic locale
D. Radiological appearance

72. Which patient is the most suitable candidate for endobronchial treatment and stenting?
a. Benign tracheal stenosis
b. Tracheomalacia
c. Endobronchial tumor obstructing carina
d. Malignant tracheoesophageal fistula
e. Benign tracheoesophageal fistula

73. Which one is a definitive indication for a segmentary resection?
f. Metastasectomy
g. Lung cancer
h. Bronchiectasis
i. Lung cancer with N2
j. Lung cancer smaller than 3 cm

74. In a bronchiectatic patient with massive haemoptysis who has bilateral disease, optimum management is ...?
a. Resection of diseased segments
b. Endobronchial treatment with ice
c. Embolisation
d. Resection of the bleeding lobe
e. Intubation and wait