

Government Medical College and Hospital Sector 32, Chandigarh

Post: Senior Resident Tuberculosis and Respiratory Diseases

QUESTION BOOKLET

Time: 120 Minutes

Number of Question: 100

Maximum Marks: 100

Name of Candidate

Roll Number: In figure

In Words

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Signature of the Candidate: _____

DO NOT OPEN THE SEAL ON THE BOOKLET UNTIL ASKED TO DO SO

INSTRUCTIONS:-

1. Write your Roll Number on the Question Booklet and also on the OMR Sheet in the space provided. You will be required to give your thumb impression on the OMR sheet in the space provided.
2. This question booklet contains 100 MCQ's. Once you are permitted to open the Question Booklet, please check for any missing question / misprint etc. and in case of any discrepancy, inform the Assistant Superintendent / Invigilator within 10 minutes of the start of the test.
3. Each question has four alternative answer (A, B, C, D) out of which only one is correct. For each question, **darken only one bubble (A or B or C or D)**, whichever you think is the correct answer, on the OMR Answer sheet **with Black or Blue Ball Pen only**. Do not use any other Pen / Gel pen / Pencil etc. **Do not Tick \checkmark or \times on the OMR Sheet**. Darken the bubbles in the OMR Answer Sheet according to the Serial No. of the Questions given in the Question Booklet.
4. Each MCQ is of One (01) mark. There is no negative marking.
5. If you do not want to answer a question, leave all the bubbles corresponding to that question blank in the OMR Answer sheet.
6. The OMR Answer sheet is designed for computer evaluation. Therefore, if you do not follow the instructions given, it may make evaluation by the computer difficult. Any resultant loss to the candidates on the above account, i.e. not following instructions completely and properly, shall be the responsibility of the candidates only.
7. After the test, handover the Question Booklet and OMR sheet to the Invigilator on duty.
8. A Candidate who creates disturbance of any kind or changes his/her seat or is found in possession of any paper or the any assistance or found giving or receiving assistance or found using any other unfair means during the examination will be expelled from the examination by the Centre superintendent/Observer whose decision shall be final.
9. Telecommunication equipment such as pager, cellular phone, wireless, scanner, smart watch/ watch etc. is not permitted inside the examination hall. Use of calculators is not allowed.
10. Candidate should ensure accuracy of their personal details on the OMR Sheet i.e. Name and Roll No. as well as thumb impression. The personal details are to be filled in by the candidates with his/her own hand writing.

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- In West's lung model, zone 2 will be characterized by: (where Palv is alveolar pressure; Ppa is pulmonary artery pressure, pla is left atrial pressure.)
 - Pla>Palv>Ppa
 - Ppa>Palv>Pla
 - Palv>Ppa>Pla
 - Palv>Pla>Ppa
 - The point where the recoil of the chest wall equals the elastic recoil of lung is called
 - Expiratory reserve volume
 - Functional residual capacity
 - Closing capacity
 - Total lung capacity
 - A patient has been assessed for severity of COPD according to GOLD criteria. Which of the following will best represent his post bronchodilator spirometry of FEV1/FVC <70% and FEV1 30-50%?
 - Mild
 - Moderate
 - Severe
 - Very severe
 - Which of the following will be best initial diagnostic modality for a patient suspected to have acute pulmonary embolism presenting with hypotension?
 - Echocardiography
 - D-dimer assay
 - V/Q scan
 - Computed tomographic pulmonary angiography
 - In tension pneumothorax, there is
 - Chest wall expansion on affected side
 - Negative intrapleural pressure
 - Increased compliance of lung
 - Decreased auto PEEP
 - Intervention that has not been shown to improve survival in patients with ARDS includes:
 - Using high levels of positive end expiratory pressure (PEEP)
 - Limiting tidal volume to 6 ml/kg
 - Use of neuromuscular blockers in early phase
 - Prone positioning
 - The following are ventilation targets in ARDS except:
 - PaCO2 goal of <60 mmHg
 - pH goal of 7.30-7.45
 - oxygenation goal: PaO2 55-80 mmHg
 - Plateau pressure \leq 30cm H2O
 - Which of the following organism causing community acquired pneumonia has an increased association with COPD?
 - Pneumococcus
 - Hemophilus influenza
 - Gram negative bacilli
 - Mycoplasma pneumonia
 - Which of the following antiretroviral drug should not be given in patient on ATT
 - Efavirenz
 - Zidovudine
 - Tinofovir
 - Nevirapine
 - For the pulmonary function test results given below, which of the following will be a correct diagnosis?
Decreased total lung capacity(TLC), decreased Vital capacity (VC), decreased residual volume(RV), increased FEV1/FVC ratio, normal maximum inspiratory pressure(MIP)
 - Bronchial asthma
 - Idiopathic pulmonary fibrosis
 - Myasthenia gravis
 - COPD
 - All of the following are post mortem findings in a patient with acute severe asthma EXCEPT
 - Macrophages and CD8+ T lymphocytes are predominant cells type found
 - Occlusion of the airway lumen by mucus plugs
 - Hyperplasia of the bronchial smooth muscles
 - Thickening and edema of the airway wall

12. Typical HRCT picture of idiopathic pulmonary fibrosis is
 - A. Bilateral, peripheral and basal predominant honeycombing
 - B. Bilateral, peripheral and basal predominant ground glass opacity
 - C. Bilateral, central and apical predominant honeycombing
 - D. Bilateral, peripheral and apical predominant ground glass opacity
13. Which drug was evaluated in INPULSIS trial for IPF?
 - A. Prednisolone
 - B. Pirfenidone
 - C. N-acetylcysteine
 - D. Nintedanib
14. Pyrazinamide as an agent against tuberculosis was discovered in
 - A. 1956
 - B. 1962
 - C. 1974
 - D. 1952
15. Epithelioid cells seen in tuberculosis are modified
 - A. Lymphocytes
 - B. Macrophages
 - C. Monocytes
 - D. Neutrophils
16. As per IASLC classification thoracic lymph nodes are divided into ___ number of stations
 - A. 14
 - B. 13
 - C. 12
 - D. 11
17. Unilateral hypertranslucent lung can be seen in ?
 - A. Poland syndrome
 - B. Swyerjames Macleod syndrome
 - C. Foreign body
 - D. All of the above
18. Centrilobular nodules on HRCT are seen in all except
 - A. Hypersensitivity pneumonitis
 - B. Respiratory bronchiolitis in smokers
 - C. Hematogenous metastases to lungs
 - D. Endobronchial spread of tuberculosis
19. Poor prognostic factor in COPD is
 - A. Low BMI
 - B. Anemia
 - C. FEV1<30% of predicted
 - D. All of the above
20. Pleural fluid amylase is typically raised in the condition
 - A. Tubercular pleural effusion
 - B. Eosinophilic pleural effusion
 - C. Oesophageal rupture
 - D. Tracheal rupture
21. All diseases can present with granulomas on histopathology except
 - A. Sarcoidosis
 - B. Chronic eosinophilic pneumonia
 - C. Granulomatosis with polyangitis
 - D. Hypersensitivity pneumonitis
22. Tree in bud pattern seen on HRCT thorax anatomically represents
 - A. Secretions plugging the large airways
 - B. Secretions plugging the small bronchioles
 - C. Exudates in the peripheral interstitium
 - D. Exudates filling the alveoli
23. The apex of the upright human lung compared with the base has a:
 - A. Higher PO2
 - B. Higher ventilation
 - C. Lower pH in end capillary blood
 - D. Higher blood flow

24. The principles of mechanical ventilation in severe asthma include all of the following except,
- Permissive hypercarbia
 - Shorter exhalation time
 - Paralysis often required
 - May need addition of an inhalational agent for further bronchodilation
25. The most important stimulus controlling the level of resting ventilation is:
- pO₂ on peripheral chemoreceptors
 - pCO₂ on peripheral chemoreceptors
 - pH on peripheral chemoreceptors
 - pH of CSF on central chemoreceptors
26. bronchoscopes can be disinfected by:
- 2% glutaraldehyde
 - 10% paracetic acid
 - 25% glutaraldehyde
 - All of the above
27. World COPD day is celebrated in which month
- March
 - Feb
 - November
 - June
28. Subaortic node is named as station
- 6
 - 7
 - 5
 - 11
29. Upper zone predominance is seen in all except
- Tuberculosis
 - Silicosis
 - Asbestosis
 - Pneumoconiosis
30. Which of the following is false
- Bulging fissure sign is seen in *Klebsiella pneumoniae* pneumonias
 - HAP is defined as pneumonia developing within 24 hours of admission to hospital
 - Start antibiotics as early as possible in pneumonias
 - Hand hygiene is important for preventing VAP
31. Which of the following calcification indicate malignant lesions
- Eccentric
 - Popcorn
 - Diffuse
 - Central
32. All of the following are class one indications for NIV EXCEPT:
- Facilitating extubation in COPD patients
 - Immunocompromised patients with acute respiratory failure
 - Acute cardiogenic pulmonary edema
 - In early ARDS
33. The factor least likely to increase the risk of developing auto-PEEP is
- High lung compliance
 - Increased airway resistance
 - Low respiratory rate
 - Large tidal volumes
34. The following are clinical applications of capnometry EXCEPT:
- Diagnosis of pulmonary embolism
 - Assessment of the adequacy of cardiopulmonary resuscitation
 - Return of spontaneous circulation during Cardiopulmonary resuscitation
 - Prediction of likelihood of successful resuscitation during CPR

35. A morbidly obese patient has presented with fever and cough. He seems drowsy, has a respiratory rate of 14/min and pulse oximeter shows saturation of 80% on room air. He has been put on high concentration face mask. After sometime, ABG is done which shows pH of 7.3, pCO₂ of 39, pO₂ of 54mm Hg. What is the cause of his hypoxia?
- Shunt
 - Ventilation perfusion mismatch
 - Dead space ventilation
 - All of the above
36. All of the following indicate a massive pulmonary embolism EXCEPT:
- Elevated serum troponin levels
 - Initial presentation with hemoptysis
 - Hypokinetic ventricle on echocardiography
 - Hypotension
37. All of the following are true for d-dimer levels in assessment of pulmonary embolism except:
- A negative value is highly predictive of the absence of both DVT and PE
 - Increased levels are highly suggestive of pulmonary embolism
 - A high D-dimer concentration is an independent predictive factor for mortality.
 - It may be elevated in ICU patients having infection, inflammation, cancer, surgery and trauma
38. False statement regarding lung abscess is
- Majority of them are caused by anaerobes
 - Clindamycin may be used as first line antibiotic
 - Abscess cavity ≥ 10 cm is a poor prognostic sign
 - Duration of treatment varies from 1 to 3 months
39. Which statement is correct concerning the effects of positive pressure and PEEP on cardiovascular system?
- Measured cardiac output is always increased by positive pressure ventilation
 - The transmural left ventricular pressure is decreased by PEEP application
 - Positive intrathoracic pressure can cause a decrease in left ventricular afterload, thereby enhancing cardiac performance
 - Application of PEEP can decrease coronary artery oxygenation in patients with poor heart function.
40. Which of the following is not a criterion for defining severe community acquired pneumonia?
- Invasive mechanical ventilation
 - Leukocytosis of more than 15000cells/cubic mm
 - PaO₂/FiO₂<250
 - Thrombocytopenia <1 lakh/cmm
41. One of the following is FALSE regarding CA-MRSA (community acquired methicillin resistant Staphylococcus aureus):
- These differ from hospital acquired strains genotypically
 - It has same resistance pattern as that of hospital acquired MRSA strains
 - Most contain Pantone-Valentine leukocidin gene
 - May present as necrotizing pneumonia and shock

42. For causing VAP, which is the most common route for bacteria to gain entry in the lungs?
- By inhalation through contaminated equipment
 - By aspiration around the endotracheal tube cuff
 - From infected indwelling catheters through blood circulation
 - Embolization from infected biofilm of endotracheal tube during suctioning
43. Modified clinical pulmonary infection score (CPIS) for VAP includes all EXCEPT:
- PaO₂/FiO₂
 - Chest radiograph
 - White blood cell counts
 - Tracheal secretions culture
44. The following are causes of increased alveolar dead space except,
- Congestive heart failure
 - Pulmonary embolism
 - Atelectasis
 - Overdistension of compliant alveoli with excessive PEEP
45. A patient is being mechanically ventilated on volume controlled mode of ventilation. Depending upon the compliance and airway resistance characteristics
- Peak inspiratory pressure and tidal volume will vary
 - Peak inspiratory pressure is fixed, peak flow will vary
 - Tidal volume is fixed but peak inspiratory pressure will vary
 - Tidal volume and peak inspiratory pressure are fixed
46. Scientist of Indian origin Dr. Yellapragada Subbarow is associated with development of
- PAS
 - Rifampicin
 - Amoxicyllin
 - Tetracycline
47. Regarding *Pneumocystis jirovecipneumonia* in HIV-infected patients, which of the following statement(s) is incorrect?
- Most patients have CD4 counts <200 cells per μ L at the time of diagnosis of their first episode of *P. jirovecipneumonia*.
 - Most patients with *P. jirovecipneumonia* will have an elevated serum lactate dehydrogenase level.
 - Arterial blood gases in patients with *P. jirovecipneumonia* frequently reveal respiratory alkalosis and a widened alveoloarterial oxygen tension difference.
 - A normal chest radiograph rules out the diagnosis.
48. During resting tidal breathing, mean inspiratory airflow is greater than mean expiratory airflow. Which one of the following explains this finding?
- Expiratory muscle activity
 - Increased turbulence
 - Decreased compliance of the respiratory system
 - Increased airway radius
49. All of the following drugs have a role in the treatment of idiopathic pulmonary fibrosis, except
- Proton Pump Inhibitors
 - Pirfenidone
 - N-acetylcysteine
 - Azathioprine
50. The famous study conducted in India contributed towards changing the Sanatorium concept of TB treatment was done in which city
- Chennai (Madras)
 - Bengaluru (Bangalore)
 - Kolkata (Calcutta)
 - Mumbai (Bombay)

51. Which of the following immune check point inhibitor is used as a consolidation chemotherapy after chemoradiation in the treatment of non-small lung cancer ?
- Pembrolizumab
 - Durvalumab
 - Atezolizumab
 - Nivolumab
52. All of the following anti-TB drugs is known to predispose to seizures, except
- Cycloserine
 - Ethambutol
 - Isoniazid
 - Fluoroquinolones
53. The dose of bedaquiline from 3 to 24 weeks
- 400 mg daily
 - 400 mg three times per week
 - 200 mg three times per week
 - 200 mg daily
54. Which of the following biomarkers is a prognostic biomarker in non small cell lung cancer ?
- EGFR mutation
 - KRAS mutation
 - ALK rearrangements
 - ROS1 rearrangements
55. All of the following are good prognostic factors in predicting the survival in a patient with non small cell lung cancer except
- Male gender
 - Early-stage disease at diagnosis
 - Good performance status (PS) (ECOG 0)
 - No significant weight loss
56. Cotton dust is associated with
- Silicosis
 - Asbestosis
 - Bysinosis
 - Bagassiosis
57. A 49-year-old woman is referred for exercise testing to evaluate her dyspnoea. She stops the test because of dyspnoea at a maximal workload of 100 W (60% predicted) with a maximal oxygen uptake of 23 mL kg⁻¹ min⁻¹ (58% predicted). Her heart rate reserve is 25 beats per min and her breathing reserve is 10%. Her inspiratory capacity before and at the end of the test is 1200 and 900 mL, respectively. What is the most likely cause of her dyspnoea?
- Deconditioning
 - Congestive heart failure
 - Hyperventilation
 - Obstructive airway disease
58. Which of the following radiographic features is least likely to be found in Langerhans' cell histiocytosis of the lung?
- Diffuse nodules ranging in size up to 10 mm
 - Diffuse reticulonodular opacities
 - Pleural effusion
 - Honeycomb lung
59. Usual adult dose of Nintedanib is
- 150 mg twice a day
 - 150 mg once a day
 - 100 mg once a day
 - 100 mg twice a day
60. Air Bronchogram sign is seen in
- Pleural Effusion
 - COPD
 - Pneumothorax
 - Pneumonia
61. Which of the following is not associated with a Hydatid cyst ?
- Bulging fissure Sign
 - Water lily Sign
 - Cumbo Sign
 - Crescent sign

62. A 33-year-old man presents with minor haemoptysis, fatigue, weight loss and recurrent nasal bleeding. The chest radiograph discloses multiple dense infiltrates, some with cavitation, and the serum cytoplasmic anti-neutrophil cytoplasmic antibody (cANCA) test is positive with elevated anti-proteinase 3 (PR3) IgG. Which of the following initial treatments is most appropriate for the suspected disease?
- Infliximab
 - Methotrexate
 - Azathioprine and prednisone
 - Cyclophosphamide and prednisone
63. Scadding scoring system is used for which disease?
- Sarcoidosis
 - ABPA
 - Pneumoconiosis
 - Tuberculosis
64. Which is the drug indicated as a treatment to reduce the risk of COPD exacerbations in patients with severe COPD associated with chronic bronchitis and a history of exacerbations, is not a bronchodilator, and is also not indicated for the treatment of acute bronchospasm?
- N-acetylcysteine
 - Acebrophylline
 - Roflumilast
 - Dupilumab
65. Lofgren Syndrome is characterized by all of the following except
- Fever
 - Posteror uveitis
 - Erythema Nodosum
 - Bilateral hilar adenopathy
66. Which of the following anti TB drugs can cause hypothyroidism?
- Pyrazinamide
 - Cycloserine
 - Ethionamide
 - Moxifloxacin
67. Which of the following statements concerning initiation of β -blocker treatment in patients with advanced COPD (Global Initiative for Chronic Obstructive Pulmonary Disease grade 3 or 4) on inhalation therapy with a long-acting β -agonist and inhaled corticosteroids is correct?
- β -blockers are contraindicated.
 - Initiation of cardioselective β -blocker therapy should only be performed after measuring reversibility of airflow obstruction to inhaled β -agonists.
 - β -blockers increase the risk of exacerbations in patients with advanced COPD.
 - β -blockers reduce mortality in advanced COPD patients with overt cardiovascular diseases.
68. A 57-year-old male previously diagnosed with non-Hodgkin's lymphoma (NHL) presents with a cough and dyspnoea for 1 week. He has a history of night sweats. Examination shows a right-sided pleural effusion. A thoracentesis of the effusion reveals a milky fluid. Which one of the following statements concerning the pleural fluid is most likely to be true?
- It has a low concentration of immunoglobulins.
 - It has a low pH.
 - Its electrolyte content is lower than that of the serum.
 - Fasting makes it less milky in colour.
69. Which of the following options is of highest value for the diagnosis of hypersensitivity pneumonitis (extrinsic allergic alveolitis)?
- Exposure to a known offending antigen
 - Eosinophils in bronchioalveolar lavage fluid
 - Serum precipitins
 - Delayed response to corticosteroids

70. A Which of the following is not related to Pleural Effusion ?
- Garland triangle
 - Gorocco triangle
 - Skodiac Resonance
 - Calots triangle
71. Head cheese sign on HRCT Chest is highly suggestive of
- Pneumothorax
 - Sarcoidosis
 - ABPA
 - Hypersensitivity pneumonitis
72. Which of the following anti TB drugs doesn't have a lag period ?
- Rifampicin
 - Thiacetazone
 - Streptomycin
 - Ethambutol
73. Stratosphere sign suggests the presence of
- Haemothorax
 - Carcinoma lung
 - Pleural Effusion
 - Pneumothorax
74. Bronchial thermoplasty is a treatment for
- TB
 - ILD
 - Asthma
 - Lung cancer
75. Which of the following radiological findings is characteristic of pulmonary Langerhans' cell histiocytosis?
- Patchy consolidation
 - Crazy paving
 - Lower lobe-predominant changes
 - Cavitating nodules
76. For diagnosis of hypersensitivity pneumonitis, which of the following statements is true?
- Precipitating serum antibodies (IgG) are very sensitive.
 - A delayed cutaneous skin reaction to an incriminated antigen has a high positive predictive value.
 - A negative allergen avoidance test has a high negative predictive value.
 - A normal differential cell count in the bronchial lavage fluid excludes an acute form of hypersensitivity pneumonitis.
77. Which of the following factors does not influence TLCO measured by the single-breath method?
- Polycythaemia vera
 - Lung haemorrhage
 - Tobacco smoking
 - Tracheostomy
78. Which of the following anti TB drugs when given in intermittent regimen may cause 'Flu like Syndrome'?
- PAS
 - Streptomycin
 - Rifampicin
 - Pyrazinamide
79. A 35-year-old female is admitted to the emergency department with a history of repeated chest infections, diarrhoea, otitis media, pneumonia, lethargy and some weight loss. She has areas of vitiligo and a past history of haemolytic anaemia. Chest radiography shows bilateral mid-zone infiltrates. Pulmonary function tests show a mild restrictive ventilatory defect, with a reduced lung volume and TLCO. A transbronchial lung biopsy shows a non-caseating granuloma. Which one of the following options is the most likely diagnosis?
- Sarcoidosis
 - Tuberculosis
 - Common variable immunodeficiency syndrome
 - Waldenström's macroglobulinaemia

80. Which of the following conditions is not included in the tetrad of symptoms usually associated with narcolepsy?
- Sleep attacks
 - Hypnagogic hallucinations
 - Morning headaches
 - Sleep paralysis
81. Which of the following drugs is not a part of the B PaL regimen?
- Bedaquiline
 - Pyrazinamide
 - Pretomanid
 - Linezolid
82. Which of the following statements concerning malignant mesothelioma of the pleura is true?
- Mesothelioma is linked to cigarette smoking.
 - Lack of mesothelin in the pleural fluid most likely excludes a pleural mesothelioma.
 - Immunohistology distinguishes mesothelioma from adenocarcinoma.
 - The histological subtype is essential for the selection of treatment.
83. Which of the following statements about OSAS is false?
- Upper airway resistance is increased during sleep.
 - Apnoeas, hypopnoeas and respiratory effort-related arousals are found.
 - Sympathetic activity is increased both during sleep and wakefulness.
 - Hypoxaemia attenuates the effects of increased sympathetic tone.
84. To increase the oxygenation during IPPV all of the following are useful EXCEPT:
- Increase FiO_2
 - Increase PEEP
 - Decrease I:E ratio
 - Increase peak inspiratory pressure
85. In the setting of progressive massive fibrosis pattern on CT, which of the following would most strongly favour sarcoidosis over silicosis as the underlying cause?
- absence of lung parenchymal calcification
 - elevation of hila
 - mediastinal lymph node calcification
 - occupational history of mining
86. All of the following features are seen in asbestosis except:
- Diffuse pulmonary interstitial fibrosis
 - Fibrous pleural thickening
 - Emphysema
 - Calcific pleural plaques
87. All of the following statements about silicosis are true except:
- Pleural plaques
 - Predilection for upper lobes
 - Calcific hilar lymphadenopathy
 - Associated with tuberculosis
88. Which of the following is a prognostic factor associated with NSCLC?
- Weight loss
 - Elevated lactate dehydrogenase levels
 - Male sex
 - elevated alkaline phosphatase levels
89. Which of the following is more suggestive of small cell lung cancer than NSCLC?
- Hemoptysis
 - Pleural effusion
 - Paraneoplastic syndromes
 - Post obstructive pneumonia
90. Which of the following is only indicated in the workup of a patient with lung cancer if surgical resection is being considered?
- Aspartate aminotransferase measurement
 - serum chemistry studies
 - CT of the chest and upper abdomen
 - Mediastinoscopy

91. Which of the following is true for predictors of weaning from ventilator?

- A. They generally have low sensitivity
- B. They generally have low specificity
- C. Rapid shallow breathing index > 105 predicts high chances of successful weaning
- D. Maximal inspiratory pressure (MIP) of < -12 is highly specific for successful extubation

92. You have measured the intrinsic PEEP (PEEPi) in a patient presenting with acute exacerbation of COPD and is on mechanical ventilation. Your applied (external) PEEP (PEEPe) should be

- A. Equal to PEEPi
- B. 20% above PEEPi
- C. 20% less than PEEPi
- D. Any random level can be used

93. In all except one of the following conditions, peak inspiratory pressure will increase but plateau pressure will remain same:

- A. High peak inspiratory flow
- B. Endobronchial migration of tube
- C. Partial kinking of endotracheal tube
- D. Bronchospasm

94. Static compliance and dynamic compliance respectively are primarily affected by

- A. Elastic property of the lungs, minute ventilation
- B. Elastic property of the lungs, airways resistance
- C. Airway resistance, elastic property of the lungs
- D. Airway resistance, minute ventilation

95. All except one of the following clinical factors have been shown to predict a higher mortality rate in ARDs:

- A. Male sex
- B. BMI of 35
- C. Alcoholism
- D. Sepsis

96. What is the most appropriate therapy for a 40 year old male, never smoker, with newly diagnosed ALK+ non small cell lung cancer (NSCLC) with asymptomatic brain metastases?

- A. 1st generation ALK TKI (crizotinib)
- B. 2nd generation ALK TKI (alectanib, brigatinib)
- C. 3rd generation ALK TKI (lorlatinib)
- D. Chemotherapy

97. Which of the following best describes the role of echocardiography in patients with pulmonary hypertension (PH)?

- A. Provides a diagnosis of PH
- B. Provides a probability of PH
- C. Assesses prognosis of treatment
- D. Measure pre capillary pressure

98. What is a key difference of right heart catheterization (RHC) compared with Doppler ECHO when assessing the probability of PH?

- A. RHC measures the diastolic and systolic pressures
- B. Doppler ECHO measures the diastolic and systolic pressure
- C. Doppler echo does not measure systolic pressure
- D. RHC does not measure diastolic pressure

99. A 61 year old female pianist has newly diagnosed stage IV NSCLC. There were no driver mutations noted, and programmed death protein ligand 1 (PD-L1) \geq 50%. What would be the optimal first line therapy for this patient?

- A. Single agent immune checkpoint inhibitor
- B. Immune checkpoint inhibitor + chemotherapy
- C. Programmed death protein 1 (PD-1)/ PD-L1 inhibitor + cytotoxic T lymphocyte-associated antigen 4 (CTLA4) inhibitor
- D. Platinum-doublet chemotherapy

100. Which of the following biologic therapies for eosinophilic asthma targets the interleukin (IL)-5 receptor?

- A. Benralizumab
- B. Dupilumab
- C. Mepolizumab
- D. Reslizumab

SUBJECT TBRD SR KEY

1	B
2	B
3	C
4	A
5	A
6	A
7	A
8	B
9	D
10	B
11	A
12	A
13	D
14	D
15	B
16	A
17	D
18	C
19	D
20	C

21	B
22	B
23	A
24	B
25	D
26	A
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28	C
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33	C
34	A
35	A
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38	C
39	C
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87	A
88	A
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91	B
92	C
93	B
94	B
95	B
96	B
97	B
98	A
99	A
100	A