

PULSE EXPERIENTIAL TEAM ASSIGNMENT

TEAM #17

1. Title of your PULSE experiential assignment.

Provide a creative and informative title.

Pulmopardy! A Respiratory Pathology Game Show

2. Please summarize your PULSE experiential assignment (max 300 words).

Provide a non-technical (lay) summary of your PULSE assignment. Prompts to think about: What is the topic? What is the format? Why did you choose this topic and format? The summary for lay audience is a brief and accessible summary of the assignment that is used to explain complex ideas, technical writing and scientific terms to people who do not have prior knowledge of the subject (e.g., high school science level). This summary should include the importance, impact, and content of your assignment to a broader audience.

[Team 23 is an example of an informative lay summary.]

Our assignment covers a wide range of topics in respiratory pathology, including asthma, emphysema, pneumonia, ARDS, COPD, cancer, etc. in an interactive game show inspired by Jeopardy!™. We chose this topic and format because it's a fun and interactive way to explore common respiratory diseases. We chose the main lung diseases that we covered in class: asthma, emphysema, pneumonia, and ARDS, as our categories, and we added an extra category called "all things respiratory" to include some miscellaneous lung pathology topics. We wanted to incorporate all components of pathology, so we formed our question prompts around signs and symptoms, etiology, pathogenesis, treatment, and complications. To make it consistent, we aligned those categories in order of the money value for each question (ie. Signs and symptoms are at the \$200 level for each disease category).

Asthma is a chronic, inflammatory disorder where the airway narrows, triggered either by a hyper response to an allergen (atopic), or by a cause such as exercise, or cold air (non-atopic).

Emphysema or chronic obstructive pulmonary disorder (COPD) is characterized by permanent damage to alveolar walls and abnormal growth of airspaces. There are three types of emphysema: centriacinar, panacinar, and distal acinar.

Pneumonia is an infection of the lung tissue and is characterized by an inflammatory fluid filling the alveolar spaces. There are two main types of pneumonia: hospital acquired and community acquired, which differ based on the type of bacteria that causes them.

Acute respiratory distress syndrome (ARDS) is a severe condition where there is inflammation and fluid build-up in the alveoli, which can interfere with oxygen getting to the blood.

Our final section “All things respiratory” included additional topics such as respiratory anatomy, tuberculosis, lung cancer, and granulomatous lung disease.
3. Provide up to 6 keywords relevant to your PULSE experiential assignment. <i>3-6 keywords are ideal.</i>
Respiratory, Game, Asthma, Emphysema, ARDS, Pneumonia
4. Identify the course topic with which your PULSE assignment most aligns. <i>Refer to the various topics outlined under ‘Course content and Schedule’ in the syllabus (e.g. Inflammation).</i>
Respiratory Diseases
5. What are the learning outcomes? <i>There should be a minimum of 2 learning outcomes for your assignments. For further information on learning outcomes, the Centre for Teaching and Learning offers information: https://teaching.uwo.ca/curriculum/coursedesign/learning-outcomes.html</i>
1. Acute lung injury and the underlying pathological basis of ARDS 2. Pathologic changes in asthma 3. Basics of granulomatous lung disease including Tuberculosis 4. Community-acquired bacterial pneumonia and contrast with hospital-acquired pneumonia 5. Effects of cigarette smoke on the lung – including emphysema and lung cancer
6. Why did the team select the chosen topic and the medium? How will the topic and medium of choice help learners?
We chose to do our assignment on respiratory pathology, using a jeopardy game show medium to make the topic interactive and exciting, while testing knowledge on respiratory diseases. We think this will help learners with this material because it makes learning more interesting and fun! Additionally, respiratory diseases are very common in society, and we think it’s important to raise awareness, specifically about modifiable risk factors (ie. Smoking), so learners understand the importance of protecting the lungs.
7. Did the team use an artificial intelligence (AI) technology tool? If so, which AI technology tool(s) did the team use? What other technology tools did the team use? Is the technology tool novel? Is the team using this technology tool in a

novel fashion? If the team did not use technology tool, why did the team decide against using the technology tool(s)?

Please include details (e.g., for what purpose was the tool used for? Why was the tool the best tool to use for your assignment? Are there alternative tools that were considered?)

Since Jeopardy! is trademarked, we decided to use chatGPT version 5.3 to help us come up with a creative name for our respiratory pathology themed jeopardy. We landed on “Pulmopardy!”. We then inputted the original Jeopardy! logo and asked it to create a Pulmopardy! Logo in the same style, which is seen on the introduction slide of our presentation. This was used in a novel fashion, as Pulmopardy! is a new idea we had to come up with. We also used chatGPT version 5.3 to help create prompts for the host’s script, and Julia used it to convert her ARDS research into the jeopardy-style outputted script. We thought chatGPT was sufficient for what we needed to use it for, and did not consider any other AI platforms. It gave us the desired result, so we did not feel the need to consult other platforms to confirm either.

8. How is your PULSE experiential assignment innovative and/or novel?

Describe what about the PULSE assignment is innovative/novel. Is there a particular component or content that is innovative/novel? How is it different from other content that already exists?

The format our PULSE assignment is delivered through introduces novelty through its uniquely high degree of engagement and interactivity. Rather than delivering information through a conventional lecture or static infographic, we present the material through a Jeopardy-style game that introduces an element of playfulness and competition, fostering greater engagement and reinforcing learning through interaction. Additionally, instead of presenting all the material simultaneously, the game format breaks complex information into smaller, digestible segments that are introduced progressively through questions and answers.

9. If you used an AI tool, please copy and paste the prompt(s)/question(s) used along with the output(s)/answer(s) from the AI tool.

The response here is to allow others to replicate the team’s work. If the prompts/outputs are lengthy (over 1 page), please attach it as a separate document and note below [Please see attached document].

Prompt: is there a way to retitle jeopardy in a quick catchy respiratory play on words. only 1-2 words

Response: Yes — here are quick 1–2 word respiratory-themed twists on “Jeopardy” that keep the same vibe: Closest to “Jeopardy”: JeoparDyspnea ★ (probably the best), JeoparD-Air-y, JeoparLung. Respiratory pun titles: Pulmonardy, DyspneaDy, PulmoPardy, BronchoPardy. My top picks for a slide title: 🫁 JeoparDyspnea (funniest and most obvious), 🫁 PulmoPardy (clean and still sounds like Jeopardy), 🫁 BronchoPardy (very respiratory-specific)

Prompt: generate a transparent background title in this exact font and style saying

"Pulmopardy" 



Response:

Prompt: “hiii so this is my pathology assignment; my group mates and I divvied up the work by section like pneumonia, ards, asthma, etc. I am ards. I have provided u my portion of the research for our jeopardy game (signs and symptoms, ethology, etc); and I want u to make me a script for our game entailing the prompts and answers, sprinkle in some correct and some incorrect answers for the script, supplemented by an explanation; reorganize the research from my section (ARDS) into script format, with clinical-presentation style case scenarios.”

Response:

ARDS — Jeopardy Script (Julia)

Case Study Introduction

Case Study:

A 45-year-old patient is admitted to the ICU after developing severe pneumonia. Within two days, the patient begins experiencing **extreme shortness of breath**, rapid breathing, and low oxygen levels that **do not improve even with supplemental oxygen**. On exam, the physician hears **crackles in the lungs**, and chest imaging shows **bilateral patchy opacities indicating fluid in the alveoli**.

100 – Signs & Symptoms

Prompt:

A patient with severe lung inflammation presents with **rapid, labored breathing**, **low blood oxygen levels that are difficult to correct**, **crackles on lung exam**, and **severe shortness of breath developing over a short time period**. Imaging reveals **fluid-filled alveoli in both lungs**.

Answer:

What is **Acute Respiratory Distress Syndrome (ARDS)**?

Host:

Correct! ARDS presents with **severe respiratory distress**, **hypoxemia that is resistant to oxygen therapy**, **tachypnea**, and **diffuse crackles due to fluid accumulation in the alveoli**. Imaging often shows **bilateral patchy opacities**, reflecting widespread inflammation and fluid leakage in the lungs. 

200 – Etiology

Prompt:

A previously healthy patient develops **sepsis following an abdominal infection**. Shortly afterward they begin experiencing severe breathing difficulty and low oxygen levels due to widespread lung inflammation.

WRONG:

What is **asthma**?

Host:

Incorrect! Asthma is a chronic inflammatory airway disease caused by bronchoconstriction and hypersensitivity reactions. This patient's condition developed **after a systemic inflammatory insult**, which points toward ARDS.

Answer:

What is **sepsis-induced Acute Respiratory Distress Syndrome**?

Host Explanation:

Correct! ARDS is **not a primary disease**, but rather a severe inflammatory response to lung or systemic injury. Common triggers include **sepsis**, **pneumonia**, **aspiration of stomach contents**, **trauma**, or **toxic inhalation**. 

300 – Pathogenesis

Prompt:

Following severe infection, inflammatory mediators damage the **alveolar epithelium and capillary endothelium**. Protein-rich fluid leaks into the alveoli, filling the air spaces and preventing oxygen from entering the bloodstream. Blood continues to flow through these poorly ventilated areas, causing severe hypoxemia.

WRONG:

What is mucus plugging of the bronchi?

Host:

Not quite! Mucus plugging is more characteristic of diseases like asthma or chronic bronchitis.

Answer:

What is diffuse alveolar damage leading to impaired gas exchange in ARDS?

Host Explanation:

Correct! ARDS occurs when **widespread inflammation damages the alveolar-capillary barrier**, causing **fluid leakage into alveoli, reduced lung compliance, and severe ventilation-perfusion mismatch**, which results in hypoxemia that is difficult to correct even with oxygen therapy. [Pathology Assignment Research-4](#)

500 – Complications

Prompt:

A patient with ARDS who has been on a ventilator for several days develops worsening lung damage and eventually develops **collapsed lung tissue due to pressure injury**, as well as a secondary infection from prolonged intubation.

WRONG:

What is pulmonary embolism?

Host:

Incorrect! Pulmonary embolism involves a blood clot blocking pulmonary circulation, which is not the complication being described here.

Answer:

What are complications of ARDS such as ventilator-associated pneumonia, barotrauma, or pulmonary fibrosis?

Host Explanation:

Correct! ARDS can lead to serious complications including ventilator-associated pneumonia, pneumothorax or barotrauma from ventilator pressure, pulmonary fibrosis due to chronic inflammation, and multi-organ failure from prolonged hypoxemia. Mortality rates can reach 30–40% in severe cases. [Pathology Assignment Research-4](#)

400 – Treatment

Prompt:

A patient with severe ARDS is admitted to the ICU with dangerously low oxygen levels. They are placed on a ventilator using **low tidal volume ventilation**, given **positive end-expiratory pressure to keep alveoli open**, and positioned **face-down to improve oxygenation**.

WRONG:

What is treatment with inhaled bronchodilators?

Host:

Incorrect! Bronchodilators are commonly used in diseases such as asthma or COPD, where airway constriction is the primary problem.

Answer:

What is supportive management of ARDS using mechanical ventilation and oxygen therapy?

Host Explanation:

Correct! Because there is **no direct cure for ARDS**, treatment focuses on **supporting oxygenation while addressing the underlying cause**, such as infection. Strategies include **mechanical ventilation, PEEP, prone positioning, and in severe cases ECMO**. [Pathology Assignment Research-4](#)

10. If you did not use an AI tool, please attach a copy of the team’s notes to the assignment.

The response here is to allow others to observe the ‘behind the scenes’ team’s work.

Our background research is attached as a separate file in our team’s submission.

11. How did the team ensure the veracity of the information presented in the PULSE assignment?

The response should highlight how the team has ensured that the information presented in the assignment is evidence-based and not spreading misinformation. You should specifically mention which databases (if any) or textbook materials you used, and how you kept track of the sources/references for each claim. If AI provided you with false information, please describe how the team has fact-checked the AI response and the legitimate (scientific) sources you used. A reference document should be provided in the reference section (15. References) below. Please ensure to include in-text citations in your assignment where applicable.

Most of our information was collected from the respiratory pathology lesson notes provided by our instructor. We were sure to check the references he provided for these notes to verify. No additional information collected was sourced using AI, so we were confident in our findings being accurate. We all found our additional references on Google Scholar and kept track of what we were using each reference for on our shared research document.

12. Write a meaningful team reflection about the PULSE session (max 250 words).

Prompts to help your team write the reflection: Were there any team/individual biases that surfaced when creating content for the assignment? Did the team implement any practices to ensure the content was equitable, diverse, and/or inclusive? How has the PULSE assignment helped with the team's learning? If the team had to estimate, how long did the assignment take? What worked well for your team? What would the team do differently next time? What were the opportunities and challenges with creating the PULSE assignment to help others' learning? Were there any barriers or limitations?

Our team had a very positive experience completing the PULSE assignment. Throughout the process, we did not identify any significant individual or group biases influencing our content creation. While we did not explicitly implement structured diversity and inclusivity frameworks, we aimed to present information in a clear, accessible, and engaging way for all learners by using a game-based format.

This assignment strongly supported our learning. By dividing the project into sections, with each member assigned to a specific respiratory pathology, each team member became an expert on their topic. Teaching the material through a Jeopardy inspired activity further reinforced our understanding and required us to think critically about how to present concepts in an applied way.

We began working on the assignment gradually starting in November, which helped reduce stress and allowed for consistent progress. If condensed, we estimate the total workload to be approximately 15 hours. One of our greatest strengths as a team was communication. We frequently met after class for focused work sessions, which allowed us to collaborate efficiently, clarify uncertainties in real time, and maintain accountability.

If we were to improve, we might consider incorporating more explicit strategies to ensure inclusivity, such as discussing specific patient populations in the prompts/questions. We also would attempt to film our video in person, rather than on Teams, to give a more real-life game show feel. Overall, this project provided valuable experience in collaborative learning and designing educational content for others.

13. Write the contributions of individual team members using unique initials.

Example: All team members contributed to the design of the prompts used in the technology tool, ChatGPT (GPT-3.5). T.K and T.K2 fact checked the information presented by ChatGPT using published literature on PubMed (PMID 29211319, 32477271).

Y.Z finalized and formatted the final infographic and compiled the prompts and outputs. P.E was involved in...

K.W.: Researched and created the pulmopardy questions and cases for the pneumonia section, along with the annotated bibliography for the pneumonia section. Worked as a team to fill out the team assignment document together.

J.N.: Researched and created the pulmopardy questions and cases for the ARDS section, along with the annotated bibliography for the ARDS section. Edited the pulmopardy video.

P.T.: Researched and created the pulmopardy questions and cases for the emphysema and all respiratory section, along with the annotated bibliography for the emphysema section. Worked as a team to fill out the team assignment document together.

K.B.: Researched and created the pulmopardy questions and cases for the asthma section, along with the annotated bibliography for the asthma section. Worked as a team to fill out the team assignment document together.

15. References

Please provide a numbered reference list with Nature citation style. [Please feel free to use citation management software (i.e., free citation manager, e.g., Zotero and Mendeley)]

1. Cecchini M. Respiratory pathology – high yield notes [lecture notes]. London (ON): Western University, LHSC University Campus; 2026.
2. Papi A, Blasi F, Canonica GW, Morandi L, Richeldi L, Rossi A. Treatment strategies for asthma: reshaping the concept of asthma management. *Allergy, Asthma & Clinical Immunology* [Internet]. 2020 Aug 15;16(1):75. Available from: <https://aacijournal.biomedcentral.com/articles/10.1186/s13223-020-00472-8>
3. Cleveland Clinic. Pneumonia [Internet]. Cleveland Clinic. Cleveland Clinic; 2022. Available from: <https://my.clevelandclinic.org/health/diseases/4471-pneumonia>
4. Rhedin S, Kvist B, Caffrey Osvald E, Karte G, Smew AI, Nauc  r P, et al. Penicillin V versus amoxicillin for pneumonia in children—a Swedish nationwide emulated target trial. *Clinical Microbiology and Infection*. 2024 Nov;30(11):1418–25.
5. Paulo. Diagnosis and augmentation therapy for alpha-1 antitrypsin deficiency: current knowledge and future potential. *Drugs in context*. 2023 Jul 20;12:1–9.
6. Boudabous S, Bouacida I, Yahia MBH, Zribi H, Marghli A. Surgical management of infected emphysema bulla: A case series. *International Journal of Surgery Case Reports*. 2025 Jan;126:110718.

7. The ARDS Definition Task Force. Acute Respiratory Distress Syndrome: The Berlin Definition. JAMA [Internet]. 2012 Jun 20;307(23). Available from: <https://jamanetwork.com/journals/jama/article-abstract/1160659>
8. Cleveland Clinic. Acute Respiratory Distress Syndrome (ARDS): Symptoms, Treatment [Internet]. Cleveland Clinic. 2023. Available from: <https://my.clevelandclinic.org/health/diseases/15283-acute-respiratory-distress-syndrome-ards>
9. <https://www.facebook.com/Medical.Blog>. Acute Respiratory Distress Syndrome Definitions – LITFL [Internet]. Life in the Fast Lane – LITFL – Medical Blog. 2019. Available from: <https://litfl.com/acute-respiratory-distress-syndrome-definitions/>

16. Annotated Bibliography

An annotated bibliography is a list of sources (books, articles, websites, etc.) that you used for your project. Each entry has two parts:

1. *Citation – written in the required citation style (same formatting and order as the Nature citation style in your list of references).*
2. *Annotation – a short paragraph that summarizes, evaluates, and explains how the source is useful for your assignment.*

Why do this?

- *Helps you keep track of your research.*
- *Shows your instructor you read and understood your sources.*
- *Develops critical thinking by requiring you to evaluate the quality and relevance of each source.*

Write the annotation (about 150–200 words each)

- *Summary: Briefly describe the main argument or purpose of the source.*
- *Evaluation: Comment on the credibility, strengths, or weaknesses of the source.*
- *Relevance: Explain how you will use this source in your assignment.*

1. Cecchini M. Respiratory pathology – high yield notes [lecture notes]. London (ON): Western University, LHSC University Campus; 2026.

The purpose of this source was to develop a basis of respiratory pathology knowledge prior to developing the case-based questions for our Pulmopardy game show. Any additional information needed that was not found in the lecture notes was researched from external sources. The lecture notes briefly outline all respiratory pathology topics that we covered in Pathology 3500 at Western University. The notes cover the major diseases that we included as our categories in the game show, including asthma, emphysema, pneumonia, ARDS, lung cancer, tuberculosis, etc. This

source was written by Dr. Matt Cecchini, a respiratory pathologist at LHSC and is taught to science students at Western University, verifying the credibility of the information. A strength of this source is that it provides a general overview of all topics covered in our assignment and is organized with clinical correlations. A limitation of this source was the condensed format that lacked depth and detailed explanations, making it difficult to fully understand the more complex respiratory problems. This source was used in our assignment as an initial basis of information for the Pulmopardy categories, specifically signs and symptoms, etiology, pathogenesis, complications, and treatment for each respiratory disease.

2. Papi A, Blasi F, Canonica GW, Morandi L, Richeldi L, Rossi A. Treatment strategies for asthma: reshaping the concept of asthma management. *Allergy, Asthma & Clinical Immunology* [Internet]. 2020 Aug 15;16(1):75. Available from: <https://aacijournal.biomedcentral.com/articles/10.1186/s13223-020-00472-8>

The purpose of this source was to outline the current treatment strategies and management for asthma. The article highlights a control-based, stepwise treatment plan in which patient symptoms, risk factors, and other histories are continuously assessed to guide therapy adjustments. The source also explains the role of short-acting beta-agonists (SABA) for quick symptom relief in the event of an asthma attack, and long-acting beta-agonists for maintenance therapy, noting that the combination of ICS and LABA are more effective in improving asthma control rather than just using a SABA alone when needed.

This source is highly credible, as it comes from a peer-reviewed journal article written by multiple authors with an expertise in respiratory medicine, and is published in *Allergy, Asthma, and Clinical Immunology*. Its strengths consist of its evidence-based approach and clear explanation of current treatment guidelines. A limitation was that they used quite complex scientific language at times, which can take time to understand well.

This source was used in the assignment to identify the treatment strategies for asthma. It helped provide a more detailed insight into the rationale behind stepwise management and medication use for asthma.

3. Cleveland Clinic. Pneumonia [Internet]. Cleveland Clinic. Cleveland Clinic; 2022. Available from: <https://my.clevelandclinic.org/health/diseases/4471-pneumonia>

The purpose of this source is to briefly outline what pneumonia is, its symptoms and causes, diagnostics, treatment, and the differentiation between each type. This source explains the pathology of pneumonia in simplified terms to make it easier for anyone to understand. The source is credible and medically reviewed to ensure the accuracy of the information. The information aligns with what was taught in class, except that it covers additional types of pneumonia (e.g., ventilator-associated pneumonia). This source is good for a basic understanding of pneumonia, but its weakness is the lack of scientific detail and specific case-based information.

This source was used in this assignment to support the information we learned in the respiratory lectures in class. It allowed us to create clinical cases for the game to show questions, specifically for the signs and symptoms and etiology categories. Overall, this source was used to strengthen our understanding of pneumonia, so that we could apply the concepts differently.

4. Rhedin S, Kvist B, Caffrey Osvald E, Karte G, Smew AI, Naucler P, et al. Penicillin V versus amoxicillin for pneumonia in children—a Swedish nationwide emulated target trial. *Clinical Microbiology and Infection*. 2024 Nov;30(11):1418–25.

The purpose of this source is to analyze the difference between penicillin and amoxicillin as a treatment for pneumonia. These are both bacteriocidal antibiotics that treat infections by inhibiting bacterial cell wall synthesis. Amoxicillin can be used for both gram-positive and gram-negative bacteria, whereas penicillin primarily targets gram-positive bacteria, meaning amoxicillin is more broad-spectrum than penicillin. This was an important differentiation for our pneumonia treatment case question, since this source showed that amoxicillin can treat many strains of community-acquired pneumonia caused by both *Streptococcus pneumoniae* and *Haemophilus influenzae*, but penicillin is only effective for treating *Streptococcus pneumoniae*. This source is an actual research study, published in “Clinical Microbiology and Infection,” making it reliable. This study did a good job outlining why amoxicillin and penicillin are different; however, the goal of the study was to determine the most effective treatment for pneumonia in Swedish children, which was not necessary information for our project. Overall, this was a good source to support and further deepen our understanding of the treatment options for pneumonia.

5. Paulo. Diagnosis and augmentation therapy for alpha-1 antitrypsin deficiency: current knowledge and future potential. *Drugs in context*. 2023 Jul 20;12:1–9.

This article reviews the diagnosis, pathophysiology, and treatment of alpha-1 antitrypsin (A1AT) deficiency, with a focus on augmentation therapy and emerging clinical approaches. It explains that A1AT deficiency is a protein-folding disorder in which misfolded A1AT accumulates within hepatocytes instead of being properly secreted. This intracellular accumulation leads to cellular stress, inflammation, and progressive liver damage, while reduced circulating A1AT contributes to lung tissue destruction. As a recent peer-reviewed publication, this source is credible and provides up-to-date clinical and mechanistic information. A key strength is its clear explanation of how molecular abnormalities translate into both pulmonary and hepatic disease, although it emphasizes treatment strategies more than detailed liver pathology. This source was used to develop a prompt explaining the mechanism of liver disease in A1AT deficiency, specifically highlighting the role of protein misfolding and intracellular accumulation in hepatocytes.

6. Boudabous S, Bouacida I, Yahia MBH, Zribi H, Marghli A. Surgical management of infected emphysema bulla: A case series. *International Journal of Surgery Case Reports*. 2025 Jan;126:110718.

This case series examines the surgical management of infected emphysematous bullae, focusing on the clinical presentation, surgical approach, and patient outcomes following bullectomy. The article describes how large bullae can become infected and contribute to respiratory complications, requiring surgical removal to improve lung function and prevent further deterioration. It also outlines key aspects of the surgical process and postoperative recovery. As a recent peer-reviewed case series, this source is credible and provides practical clinical insight into the management of structural complications of emphysema. A strength of the study is its detailed description of surgical intervention and real patient outcomes, although its findings are limited by the small sample size typical of case series. This source was used to develop a prompt related to treatment of distal acinar (paraseptal) emphysema, specifically highlighting the role of removing bullae and understanding the surgical management of these structural abnormalities.

7. The ARDS Definition Task Force. Acute Respiratory Distress Syndrome: The Berlin Definition. JAMA [Internet]. 2012 Jun 20;307(23). Available from: <https://jamanetwork.com/journals/jama/article-abstract/1160659>

The purpose of this source was to provide the official diagnostic criteria and severity classification for ARDS. The Berlin Definition outlines key components including timing of onset, imaging findings (bilateral opacities), exclusion of cardiac causes of edema, and severity classification based on $\text{PaO}_2/\text{FiO}_2$ ratios. This source is highly credible as it is a peer-reviewed consensus definition published in JAMA and widely used in clinical practice. Its strengths include standardized diagnostic criteria and clinical applicability, though it uses more technical language that requires interpretation. This source was used to accurately define ARDS and support the diagnostic criteria and severity classification included in the project.

8. Cleveland Clinic. Acute Respiratory Distress Syndrome (ARDS): Symptoms, Treatment [Internet]. Cleveland Clinic; 2023. Available from: <https://my.clevelandclinic.org/health/diseases/15283-acute-respiratory-distress-syndrome-ards>

The purpose of this source was to provide a clear overview of ARDS symptoms, complications, and treatment strategies in an accessible format. It outlines key clinical features such as severe dyspnea, hypoxemia resistant to oxygen therapy, tachypnea, and crackles, as well as complications including ventilator-associated pneumonia, barotrauma, pulmonary fibrosis, and multi-organ failure. This source is credible as it comes from a well-established clinical institution and is medically reviewed. Its strengths include clear explanations and clinical relevance, though it simplifies some mechanisms. This source was used to support the signs and symptoms section, complications, and treatment overview in the ARDS content.

9. LITFL (Life in the Fast Lane). Acute Respiratory Distress Syndrome (ARDS) – Definitions [Internet]. Available from: <https://litfl.com/acute-respiratory-distress-syndrome-definitions/>

The purpose of this source was to provide a concise and clinically oriented explanation of ARDS pathophysiology and etiology. It explains how injury to the alveolar-capillary barrier leads to increased permeability, fluid accumulation in alveoli, inflammation, and impaired gas exchange. It also distinguishes between direct and indirect causes of ARDS, such as pneumonia, aspiration, and sepsis. This source is credible as it is widely used in medical education and reviewed by clinicians, though it is not a primary research article. Its strengths include clear, step-by-step explanations of mechanisms that are easy to apply clinically. This source was used to support the pathogenesis and etiology sections of the ARDS content.