PULSE EXPERIENTIAL TEAM ASSIGNMENT

Team #: 27

Link to test your knowledge quiz: https://testyourknowledge.tiiny.site

1. Title of your PULSE experiential assignment. *Provide a creative and informative title.*
When Cells Go Rogue: Understanding Respiratory Squamous Cell Carcinoma
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 PULSE assignment focuses on squamous cell lung carcinoma, a major subtype of non-small cell lung cancer that is most often linked to long-term smoking. We chose to present this topic as a podcast because listening to a conversation can feel more personal and engaging than reading a dense scientific explanation. An interview-style format lets us break down complex ideas in a way that feels natural, clear, and easier to connect with for someone without a science background. We chose this topic because squamous cell lung carcinoma is strongly connected to everyday exposures and habits, which makes it especially important from a public health perspective. Unlike some diseases that can feel distant or unpredictable, this type of lung cancer is closely tied to preventable risk factors such as smoking and radon exposure in the home. That makes it a topic people can relate to and learn from in a practical way. In our podcast, we explain what squamous cell lung carcinoma is, how it develops, and why it matters. We also highlight the ways harmful exposures can gradually damage cells over time and increase the risk of cancer. Our goal is to make this information understandable and meaningful for a broad audience, while encouraging people to think more carefully about their respiratory health and the small everyday choices that can have long-term effects.
3. Provide up to 6 keywords relevant to your PULSE experiential assignment. *3-6 keywords are ideal.*
Neoplasia, Squamous cell carcinoma, Cigarette smoking, Epithelial transformation, Diagnosis and Treatment, Radon.
4. Identify the course topic with which your PULSE assignment most aligns. *Refer to the various topics outlined under 'Course content and Schedule' in the syllabus (e.g. Inflammation).*

Section C: Respiratory Disease - Lung Carcinoma

5. What are the learning outcomes?

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

By the end of this assignment, our listeners will be able to:

1. Explain the development and key pathological features of respiratory squamous cell carcinoma by applying concepts such as dysplasia, DNA damage, and histological markers discussed throughout the episode.
2. Evaluate diagnostic approaches and treatment strategies for squamous cell carcinoma in the context of real-world clinical decision-making.
3. Analyze how environmental and lifestyle risk factors, such as smoking and radon exposure, contribute to the development of lung cancer using examples and expert insights presented in the episode.
4. Explain how advances in pathology and technology are shaping the diagnosis and treatment of respiratory squamous cell carcinoma.

6. Why did the team select the chosen topic and the medium? How will the topic and medium of choice help learners?

Medium: We chose the podcast format because it is a popular and engaging way for people to learn today. Compared with reading long paragraphs of text, listening to a conversation can feel more interesting, accessible, and easier to follow. The podcast style also lets us present complex pathology concepts in a more natural and relatable way, helping listeners stay engaged while learning about an important health topic.

Topic: We selected squamous cell carcinoma because it clearly shows how pathology is not just something that happens at the microscopic level, but something that is closely connected to real-life behaviours and environmental exposures. It is a disease strongly associated with smoking and other inhaled stressors, which makes it a meaningful example of how long-term damage to cells can lead to serious disease. This topic allowed us to connect course concepts in cellular pathology to an issue that feels immediate and relevant to everyday health.

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?)

Yes. Our team used several AI technology tools, including Claude, NotebookLM, and Google Gemini's NanoBanana 2, as well as other technology tools such as Tiiny Host and Removebg. Claude was used to generate ideas, the outline, and the script for the podcast, while NotebookLM was used to generate a transcript for the script. Furthermore, NanoBanana 2 was used to generate the logo for the podcast, and Removebg helped edit our logo. Lastly, Tiiny Host was used to publish and share our

quiz or webpage through a simple link. These tools were chosen because they were accessible, efficient, and well suited to the needs of our assignment. Although the tools themselves are not novel, since they are already widely available and commonly used, our team used them in a novel way by combining multiple AI and digital platforms into one workflow for creating an educational pathology podcast. This made our final project more polished, interactive, and accessible than a traditional written assignment.

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?

Our PULSE assignment contained a podcast style interview with a professor (Dr. Cecchini) who has years of knowledge and experience on respiratory pathology (our discussion topic). We also included a visual component, a test-your-knowledge quiz to solidify concepts and help the audience stay engaged with what we talked about.

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].

Please see attached document.
Pulse Team #27 - AI Prompts.docx

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.

N/A

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.

Our team ensured the veracity of the information presented in our PULSE assignment by grounding the podcast in credible scientific and medical sources rather than relying on AI-generated output alone. We used sources from PubMed, PubMed Central, NCBI Bookshelf, WHO, Health Canada, Cancer Research UK, PathologyOutlines, WebPathology, MD Anderson, and LUNGevity to support our claims about risk factors, histology, symptoms, diagnosis, treatment, prognosis, and prevention. These sources included peer-reviewed journal articles, medical reference materials, public health reports, and reputable educational pathology websites.

AI tools such as NotebookLM, Claude, and Google Gemini were used mainly for brainstorming, organizing ideas, improving wording and visuals, and helping structure

the script, but not as primary evidence sources. Any factual information suggested by AI was checked against legitimate scientific references before being included. If an AI-generated explanation did not match the literature or seemed too general, we revised or removed it. We also kept track of which source supported each section of the podcast by maintaining a reference list and linking specific claims to the articles or websites used in our research. This helped us avoid misinformation and ensured that the final assignment was evidence-based, accurate, and properly referenced.

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 operated with a high degree of synergy, maintaining clear communication that kept us organized throughout the project. We distributed roles equally, allowing each member to contribute their strengths to the planning, research, and podcast production phases. This collaborative environment ensured that every team member's perspective was integrated into the final narrative. This assignment significantly enhanced our learning by pushing us beyond traditional scientific writing. This new form of learning requires us to view our material from the lens of an educator rather than just a student. We estimate that the project took approximately 8–10 hours of work. One challenge we had to be aware of was bias, especially the common assumption that lung cancer is always self-inflicted through smoking. We worked to avoid reinforcing that stigma by including information about other risk factors such as radon, occupational exposures, and air pollution, and by emphasizing that not all patients with lung cancer are smokers. This helped us make the content more equitable and inclusive. One of our primary successes was the successful translation of dense histological concepts into an engaging audio script. However, the experience also highlighted areas for growth; in the future, we would implement a more structured timeline of meetings between members in order to help ourselves better with the new experience of making a podcast. Despite the challenge of simplifying clinical jargon without sacrificing accuracy, we believe our podcast serves as a powerful tool for raising awareness about squamous cell carcinoma.

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…

C.M:

- Researched on pathogenesis and molecular mechanisms.
- Edited the project template.

E.C:

- Researched on diagnosis and treatment, prevention.
- Finished annotation for all the references.
- Came up with the quiz questions and used AI to transform it into an online interactive quiz.

E.C2:

- Researched on clinical manifestations.
- Prompted AI for the script.
- Edited the podcast audio and uploaded it onto Youtube.

Everyone contributed to researching and finding sources. Most of every aspect had equal contribution from each teammate.

References

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16. Annotated Bibliography

Citation	Annotation
[1]	This source provides a clear overview of squamous cell carcinoma of the lung, including its key histologic features, diagnostic characteristics, and representative pathology images. Its main purpose is to serve as an educational and reference tool for pathology learners and professionals by summarizing the defining features of this tumour type in a concise and visual format. One of the most useful parts of this source for our project was the histology image showing classic squamous cell carcinoma, particularly the presence of obvious keratin pearls, which are a hallmark microscopic feature of this disease. As a pathology-focused educational website, PathologyOutlines is highly credible because it is widely used by medical trainees and pathology professionals for quick reference. A major strength of this source is its combination of accurate descriptive information and visual examples. A limitation is that it is designed more as a reference page than as an in-depth discussion for a general audience. This source was especially relevant to our assignment because we used its histology image in our “test your knowledge” quiz, where the audience were asked to identify which slide represented lung squamous cell carcinoma among other disease slides.
[2]	This source provides a histology image of small cell carcinoma of the lung, which is a useful comparison point when studying different types of lung cancer under the microscope. Its purpose is mainly educational, offering pathology images that help viewers recognize the microscopic appearance of specific diseases. In this case, the image was valuable because it showed a lung cancer that could be contrasted with squamous cell carcinoma in our quiz. Unlike squamous cell carcinoma, which often shows more obvious features such as keratin pearls, small cell carcinoma has a different microscopic pattern and therefore served as a strong distractor option in the question. A major strength of this source is that it is image-based and directly supports visual learning, which is especially important in pathology education. It is also relevant because WebPathology is a known educational pathology resource. One limitation is that the page is focused more on image presentation than on providing a detailed explanation for a general audience. This source was relevant to our assignment because we used the image as an incorrect answer option in our “test your knowledge” quiz to test whether listeners could accurately distinguish squamous cell carcinoma from another lung malignancy.

[3]	This source provides a histology image of lepidic adenocarcinoma of the lung and serves as another useful comparison image for distinguishing between different types of lung cancer. Its main purpose is educational, giving pathology learners access to visual examples of specific tumour subtypes. For our project, this image was helpful because it represented a lung malignancy that is histologically different from squamous cell carcinoma. While squamous cell carcinoma is often identified by features such as keratin pearls and squamous differentiation, lepidic adenocarcinoma shows a different growth pattern, making it a good alternative option in our quiz question. A strength of this source is that it supports visual learning by providing a real pathology image rather than just a written description. This is especially valuable in pathology education, where identifying microscopic patterns is an important skill. A limitation is that the page offers limited explanation and is more useful as a visual reference than as a detailed teaching source for a general audience. This source was relevant to our assignment because we used the image as one of the distractor options in our “test your knowledge” quiz, where listeners were asked to identify the correct histology slide for lung squamous cell carcinoma.
[4]	This source examines how tobacco smoke influences lung cancer development by shaping mutation patterns, selection pressures, and tumour evolution over time. Based on the title and abstract information available on bioRxiv, the paper focuses specifically on how smoking does not just increase the number of mutations, but may also change the evolutionary path that lung tumours take as they develop. That makes it useful for understanding the biological relationship between tobacco exposure and lung cancer more broadly. A strength of this source is that it appears to explore cancer development at a deeper mechanistic level rather than only describing smoking as a statistical risk factor. However, a limitation is that it is a bioRxiv preprint, meaning it has not yet been peer reviewed and should therefore be interpreted more cautiously than a finalized journal article. This source was relevant to our podcast because we discussed smoking as the strongest risk factor for respiratory squamous cell carcinoma and explained how tobacco smoke causes accumulating DNA damage in airway cells over time. It supported our explanation of how smoking contributes to carcinogenesis and long-term tumour development in lung cancers.
[5]	This article explains how tobacco smoke contributes to carcinogenesis through oxidative damage caused by reactive oxygen species (ROS), stable free radicals, and other toxic compounds in both the particulate and gas phases of smoke. The authors describe how these substances damage DNA, proteins, and lipids, and they also discuss how smoking can act synergistically with other inhaled exposures such as asbestos, radon, coal dust, and particulate matter to further increase lung cancer risk. A major strength of this source is that it provides a detailed mechanistic explanation for why smoking is such a powerful risk factor, rather than only stating that the association exists. It is also published in a peer-reviewed journal and archived on PubMed Central, which strengthens its credibility. One limitation is that it is older and broader in scope, focusing on tobacco-related

	carcinogenesis in general rather than specifically on lung squamous cell carcinoma. This source was useful for our podcast because it supported our discussion of smoking as the main risk factor for respiratory squamous cell carcinoma and helped explain how long-term smoke exposure causes progressive cellular damage that can eventually lead to malignant transformation.
[6]	This article investigates how tobacco smoking leaves distinct mutational signatures across human cancers. The authors analyzed large-scale cancer genomic data and found that smoking is associated with characteristic patterns of DNA mutations, supporting the idea that tobacco smoke contributes to cancer not only by increasing mutation burden but also by producing identifiable molecular damage. A major strength of this source is that it is a high-impact, peer-reviewed study published in Science, and it uses a very large dataset across multiple cancer types, which strengthens the reliability of its conclusions. Another strength is that it explains smoking-related carcinogenesis at the molecular level, making it more informative than sources that only describe epidemiologic associations. One limitation is that the paper is broad and covers many smoking-related cancers rather than focusing specifically on lung squamous cell carcinoma alone. This source was relevant to our podcast because it supported our discussion of smoking as the strongest risk factor for respiratory squamous cell carcinoma and helped explain how tobacco smoke causes cumulative DNA damage in airway cells over time. It was especially useful for strengthening the biological explanation behind our risk factor section rather than just stating that smoking and lung cancer are linked.
[7]	This review discusses how epithelial-mesenchymal transition, or EMT, may contribute to carcinoma invasion and metastasis by allowing epithelial tumour cells to lose cell-cell adhesion and gain migratory, invasive properties. It frames metastasis as a major turning point in cancer progression and examines whether EMT helps explain how carcinoma cells spread from the primary site to distant organs. A major strength of this source is that it addresses an important biological mechanism behind tumour progression, which makes it useful for understanding why some cancers become more aggressive over time. It is also a peer-reviewed review article published in Cancer Research, which supports its credibility. One limitation is that the article is older and discusses carcinoma biology broadly rather than focusing specifically on lung squamous cell carcinoma. This source was relevant to our project because our podcast discussed how respiratory squamous cell carcinoma can progress and become more dangerous as it invades surrounding tissue and spreads to other sites. It helped support the background understanding of invasion and metastasis as key features of cancer severity, even though EMT itself was not the central focus of our episode.
[8]	This source provides a broad overview of lung carcinoma, including its risk factors, pathology, staging, symptoms, prevention, and treatment options. It emphasizes that tobacco use is the most important risk factor for lung cancer and explains that histopathologic confirmation of tumour type is necessary because different lung cancers spread and respond to treatment differently. It also outlines common respiratory

	symptoms such as cough, hemoptysis, and pulmonary infections, and highlights the importance of stage in determining therapy. A strength of this source is that it gives a clear, organized summary of major clinical concepts in lung cancer, making it useful for background research. It is also hosted through the NCBI Bookshelf, which adds credibility as a medical reference source. However, a limitation is that it was published in 2001, so some treatment details are outdated, especially compared with modern approaches such as immunotherapy and current staging systems. This source was relevant to our podcast because it supported our discussion of smoking as a major risk factor, the common presenting symptoms of lung squamous cell carcinoma, and the idea that treatment depends heavily on stage. It was most useful for building the general clinical background of our episode.
[9]	This source provides a patient-friendly overview of squamous cell lung cancer, including what it is, where it typically develops, common symptoms, risk factors, diagnosis, biomarkers, and treatment options. The page explains that squamous cell lung cancer accounts for about 30% of lung cancers, usually arises centrally in the lung or main bronchi, and is strongly associated with smoking. It also describes symptoms such as cough, trouble breathing, chest pain, and blood in the sputum, and outlines the role of PD-L1 and other biomarkers in guiding treatment decisions. A major strength of this source is that it is clearly organized and easy to understand, making it especially useful for explaining clinical concepts to a general audience. It is also helpful because it connects pathology, staging, and treatment in one place. However, because it is a foundation education page rather than a primary research article, it is better for background information than for detailed mechanistic evidence. This source was relevant to our podcast because it supported several of the key points we covered, including the central location of squamous cell lung cancer, its strong link to smoking, and the importance of stage and PD-L1 testing in treatment selection.
[10]	This WHO fact sheet provides a broad overview of lung cancer as a global public health issue, covering its major risk factors, symptoms, diagnosis, prevention, and treatment. It emphasizes that lung cancer is the leading cause of cancer-related death worldwide and identifies smoking as the main cause, responsible for about 85% of cases. The source also outlines common symptoms such as persistent cough, chest pain, shortness of breath, hemoptysis, fatigue, weight loss, and recurrent lung infections, and explains that early detection through low-dose CT screening can improve survival in high-risk groups. A major strength of this source is its credibility, since it comes from the World Health Organization and is intended to provide accurate, accessible public health information. It is also useful because it presents the topic clearly and connects prevention, diagnosis, and treatment in one place. A limitation is that it is a general fact sheet and does not focus specifically on lung squamous cell carcinoma or histopathologic features. This source was relevant to our podcast because it supported our discussion of smoking as the major risk factor, the common symptoms of lung cancer, the value of screening, and the importance of stage in guiding treatment.

[11]	This source provides a clear, patient-friendly overview of squamous cell carcinoma of the lung, including what it is, how common it is, its symptoms, and how its diagnosis can affect treatment decisions. The article explains that squamous cell carcinoma is a subtype of non-small cell lung cancer that arises from the thin, flat cells lining the airways, and notes that it accounts for roughly 30% to 35% of lung cancers, while adenocarcinoma is more common. It also emphasizes that symptoms are often absent in the earliest stages and may only become noticeable once the tumour grows large enough to affect nearby structures. A major strength of this source is that it is medically reviewed by a UT MD Anderson medical professional and presents complex information in a way that is easy for a general audience to understand. However, because it is an educational hospital webpage rather than a primary research article, it is more useful for background and communication than for detailed scientific evidence. This source was relevant to our podcast because it supported our explanation of what squamous cell carcinoma is, how common it is compared with other lung cancer subtypes, and why symptoms often appear later in disease progression.
[12]	This article examines how stigma surrounding lung cancer can delay people from seeking medical attention when they develop symptoms. The study focuses on the idea that many people associate lung cancer so strongly with smoking that patients may feel blamed, ashamed, or less deserving of care, even when they need prompt evaluation. A major strength of this source is that it addresses an important social and behavioral barrier to early diagnosis, rather than focusing only on pathology or treatment. It is also a peer-reviewed article archived on PubMed Central, which supports its credibility. One limitation is that it is not specific to squamous cell carcinoma and does not focus on histologic or molecular features of lung cancer. However, it is still highly relevant because it helps explain why some patients may delay help-seeking despite symptoms such as persistent cough, hemoptysis, or chest discomfort. This source was useful for our podcast because we discussed the stigma around lung cancer in our risk factor section, especially through Dr. Cecchini's point that not every person with lung cancer is a smoker and that this misconception can affect support and care-seeking.
[13]	This review examines how ambient environmental pollutants and occupational exposures contribute to a wide range of respiratory diseases, including lung cancer. The authors discuss major harmful exposures such as particulate matter, diesel exhaust, asbestos, silica, heavy metals, and other workplace or air pollutants, and explain how these agents can damage the respiratory system through chronic inflammation, oxidative stress, and long-term tissue injury. A major strength of this source is that it comes from a peer-reviewed journal and provides a broad, well-organized overview of non-smoking-related respiratory risk factors. This makes it especially useful for showing that lung disease, including cancer, can arise from more than just tobacco exposure. One limitation is that the article covers respiratory diseases broadly rather than focusing specifically on lung squamous cell carcinoma, so it is better for background context than for disease-specific pathology or treatment details. This source was

	relevant to our podcast because we discussed additional risk factors beyond smoking, including occupational exposures such as asbestos and silica dust, as well as air pollution. It helped support our point that respiratory squamous cell carcinoma can be linked to environmental and workplace exposures in addition to cigarette smoke.
[14]	This article investigates whether airflow limitation is causally associated with lung squamous cell carcinoma using Mendelian randomization, a method that uses genetic variants to strengthen causal inference. The authors found that genetic predisposition to airflow limitation was associated with an increased risk of lung squamous cell carcinoma, even after adjusting for several smoking-related variables. They concluded that airflow limitation may act as an independent predictor of lung squamous cell carcinoma rather than simply reflecting smoking exposure alone. A major strength of this source is that it goes beyond standard observational association and uses a genetic epidemiology approach to better assess causality. It is also published in a peer-reviewed journal, which supports its credibility. One limitation is that it is highly technical and focused on risk prediction rather than on clinical presentation, histology, or treatment, so it is less useful for explaining disease features to a general audience. This source was relevant to our podcast because it helped support our discussion of risk factors and showed that lung squamous cell carcinoma is linked not only to smoking, but also to underlying respiratory impairment such as airflow limitation.
[15]	This article presents a pathology-focused overview of lung squamous cell carcinoma through a fictional teaching case designed for medical education. It reviews the key morphologic and clinical features of the disease, including its strong association with smoking, its tendency to arise as a central or hilar mass, and classic histologic findings such as keratinization and invasive nests of tumour cells. The article also discusses related concepts such as paraneoplastic syndromes and diagnostic reasoning, making it useful as a concise teaching resource rather than just a research paper. A major strength of this source is that it is peer reviewed and specifically created to support pathology learning, so it directly matches the educational goals of our podcast. It is also especially helpful because it focuses on squamous cell carcinoma of the lung itself rather than lung cancer in general. One limitation is that it is written at a more medical and pathology-oriented level, so some details may be too advanced for a general audience without simplification. This source was relevant to our project because it supported our discussion of the pathology, central airway location, and histologic appearance of respiratory squamous cell carcinoma, especially the features used to explain how pathologists identify this tumour subtype.
[16]	This article provides a patient-oriented overview of lung squamous cell carcinoma, focusing on how it is diagnosed, staged, and treated at different points in disease progression. It explains that diagnosis typically involves imaging followed by biopsy, and that the TNM staging system is used to guide management decisions. The article also outlines treatment approaches by stage, including surgery for

	early-stage disease, combined surgery and chemotherapy for some stage 2 cases, chemoradiation for stage 3 disease, and systemic treatments such as chemotherapy and immunotherapy for metastatic disease. A major strength of this source is that it is clearly organized by stage, which makes the treatment pathway easy to follow and useful for a general audience. However, an important limitation is that the article states it was generated with AI, reviewed by a human editor, and not independently verified by a medical professional, so it is less authoritative than a peer-reviewed medical source. This source was relevant to our podcast because it supported our discussion of how treatment for lung squamous cell carcinoma depends heavily on stage and helped reinforce the progression from surgery in early disease to systemic therapy in advanced cases.
[17]	This source provides survival statistics for lung cancer, including overall survival in the UK and five-year survival by stage in England. It explains that survival depends on several factors, especially stage at diagnosis, cancer type, general health, and treatment options. The page reports that almost 65% of people with stage 1 lung cancer survive five years or more, compared with around 5% of people with stage 4 disease, showing the major survival gap between early and advanced disease. It also notes that overall UK survival is about 45% at one year, more than 15% at five years, and around 10% at ten years. A major strength of this source is that it is produced by Cancer Research UK and based on national registry data, which makes it credible and useful for public-facing health information. Another strength is that it presents survival statistics in a very clear and accessible way. A limitation is that it discusses lung cancer broadly rather than focusing specifically on squamous cell carcinoma. This source was relevant to our podcast because it supported our discussion of how strongly prognosis depends on stage and helped reinforce why early detection and faster diagnosis matter.
[18]	This report summarizes the results of Health Canada's national survey of indoor radon levels in homes across the country. Its main purpose was to estimate how many Canadians live in homes with radon concentrations above the national guideline of 200 Bq/m³ and to identify regions where radon exposure may pose a significant health risk. The report found that 6.9% of Canadians were living in homes above the radon guideline, and it emphasized that no area of Canada is completely "radon free." It also explains that radon is invisible, odourless, and tasteless, meaning the only way to know whether a home has elevated levels is to test it. A major strength of this source is its credibility, since it comes directly from Health Canada and is based on a large national survey. Another strength is that it provides concrete Canadian data that make the public health relevance of radon easier to communicate. One limitation is that the report is older, and the page now also points readers to an updated 2024 survey with higher national estimates. This source was relevant to our podcast because it supported our prevention section, especially the point that radon is an important non-smoking-related lung cancer risk factor and that home testing is one of the most actionable prevention steps Canadians can take.