

Type: Assignments

Subject: Pathophysiology

Subject area: All Subjects

Education Level: Undergraduate/College

Length: 1 pages

Referencing style: APA

Preferred English: English

Spacing Option: Double

Title: cancer

Instructions: \* in-text citations are a requirement for credit. if you are not familiar with in-text citations (apa format) please see supplemental information under course documents. there is a link to an apa website and a ppt file that explains how and when to cite. \* this is a pathophysiology course so that aspect must be emphasized in all writing assignments. \* try and provide answers in the context of the patient (if provided). in other words, what is the underlying biology causing the symptoms? ms johanson and mr. tompkins both have lung cancer. she has a stage i tumor of the lung and he has a stage iv tumor. identify the similarities and differences between these tumors.

Cancer

Student's Name

Institutional Affiliation

Cancer

The grading of tumors depends on how they appear under the microscope. Grading of tumors serves as the cornerstone of care provision among cancer patients (Detterbeck, Boffa, Kim, & Tanoue, 2017). Grade I or IV tumors are the description of how the abnormal tumor cells look and spread. Therefore, grade IV tumors are an indication that the abnormal cells in Mr. Tompkins have spread faster than those in Ms. Johanson. Nevertheless, grade tumors should not be confused with staging that entails defining the magnitude of the tumors and the extent to which it has spread.

Ms. Johanson is suffering from grade I tumors that have affected her lungs. Lung cancer is among the leading causes of death with about 25 percent of all cancer deaths (Lu et al., 2019). Under the observation of a microscope, it would be difficult to distinguish between the normal cells and grade I tumors. A pathologist could classify that Ms. Johanson's grade I tumors resemble the surrounding usual cells and are well-differentiated. The grade I tumors also grow and spread at a slower rate than grade IV tumors with Mr. Tompkins. Besides, grade I tumors have normal tissue structures.

In the case of Mr. Tompkins, the grade IV tumors are poorly-differentiated. They look abnormal. Besides, they have abnormal tissue structures. Besides, grade IV tumors spread at a higher rate than grade I tumors. That is, they could invade other body sites away from where the original tumor site. As well, grade IV tumors are not encapsulated.

The similarities between the grade I and IV tumors are minimal. Nonetheless, the diagnosis of grade I and IV tumors could be done using biopsies. Besides, the tumors are similar in that they have invaded the same body parts. That is the lungs. Therefore, early treatment could have helped but Ms. Johanson would have higher survival chances of survival than Mr. Tompkins.

### References

- Detterbeck, F. C., Boffa, D. J., Kim, A. W., & Tanoue, L. T. (2017). The eighth edition lung cancer stage classification. *Chest*, *151*(1), 193-203.
- Lu, T., Yang, X., Huang, Y., Zhao, M., Li, M., Ma, K., ... & Wang, Q. (2019). Trends in the incidence, treatment, and survival of patients with lung cancer in the last four decades. *Cancer management and research*, *11*, 943.