

Syllabus - Distance learning
Winter Semester 2020/2021
Week 10

General Medicine

1. Online lecture via Microsoft Teams

Carcinogenesis

- Tumors – typology, epidemiology
- Benign & malignant tumors – morphologic, functional & metabolic differences; precancerosis; invasive growth
- Tumor etiopathogenesis- physical, chemical, biological factors; hereditary forms of tumors
- Tumor transformation - oncogenes, tumor suppressor genes; Multi-hit theory; Clonal evolution

2. Online seminars via Microsoft Teams according to schedules on department webpage (patfyz.medic.upjs.sk)

Carcinogenesis

- Tumor markers, clinical signs of cancers
- Paraneoplastic syndromes
- Molecular carcinogenesis - metastasis – forms, mechanisms; metastasis suppressor genes, angiogenesis; survival

Student presentations: during the online seminar according to the schedule within each group.

Dental Medicine

1. Online lecture via Microsoft Teams

Carcinogenesis

- Tumors – typology, epidemiology
- Benign & malignant tumors – morphologic, functional & metabolic differences; precancerosis; invasive growth
- Tumor etiopathogenesis - physical, chemical, biological factors; hereditary forms of tumors
- Tumor transformation - oncogenes, tumor suppressor genes; Multi-hit theory; Clonal evolution

2. Online seminars via Microsoft Teams according to schedules on department webpage (patfyz.medic.upjs.sk)

Carcinogenesis

- Tumor markers, clinical signs of cancers
- Paraneoplastic syndromes
- Molecular carcinogenesis - metastasis – forms, mechanisms; metastasis suppressor genes, angiogenesis; survival
- Precancerous states and cancers in oral cavity

Student presentations: during the online seminar according to the schedule within each group.

Recommended audiovisual materials

Carcinogenesis

- Introduction to Cancer Biology (Part 1): Abnormal Signal Transduction
https://www.youtube.com/watch?v=jjfYQMW_nek
- Introduction to Cancer Biology (Part 2): Loss of Apoptosis <https://www.youtube.com/watch?v=8VSgOeJy4dQ>
- Introduction to Cancer Biology (Part 3): Tissue Invasion and Metastasis
<https://www.youtube.com/watch?v=bdWRZd19swg>
- Introduction to Cancer Biology (Part 4): Angiogenesis https://www.youtube.com/watch?v=Ep_nCSEDeAE
- Cancer - Introduction I <https://www.youtube.com/watch?v=M5VM62MvKxM>
- Cancer - Introduction II <https://www.youtube.com/watch?v=H376Q6H0Se4>

- Oncogenetics - Mechanism of Cancer (tumor suppressor genes and oncogenes) <https://www.youtube.com/watch?v=1mo80kTZqW4>
- Metastasis and angiogenesis https://www.youtube.com/watch?v=eSwG5O_kiQQ
- P53 animation - tumor suppressor gene animation <https://www.youtube.com/watch?v=K79fWVwELR0>
- IMMUNOTHERAPY: The Path to a Cancer Cure (For Clinicians) <https://www.youtube.com/watch?v=UbFjiWOBerA>
- Oral Cancer - causes, symptoms, diagnosis, treatment, pathology <https://www.youtube.com/watch?v=aTvE7KM04EY>