Human papillomavirus-independent cervical cancer
Andréina Fernandes, David Viveros-Carreño, Jorge Hoegl, Maira Ávila, René Pareja.

Cervical cancer
- Squamous cell carcinoma
  - HPV-associated.
  - HPV-independent.
- Cervical adenocarcinoma
  - HPV-associated.
  - HPV-independent.
(WHO Female Genital Tumors classification, 2020).

Objective:
To provide an overview of HPV-independent cervical cancer, evaluating diagnostic techniques, molecular profiles, and clinical outcomes.

HPV-independent cervical cancer

- Hit and run theory:
  - Potentially a biologically distinct subgroup.
  - Possible low responses to standard treatment.
  - New therapeutic targets.
  - Future research: to report on clinical outcomes, to evaluate the overall response rates to specific treatments and to consider new biomarkers.

- Associated with adenocarcinomas and squamous subtypes.
- Lymph node involvement in early stages.
- Distant metastasis.
- Worse oncological outcomes.

- ↓ proliferative activity.
- ↓ p53 immunostaining.
- ↓ expression of CDK inhibitors proteins.
- Alterations in PTEN, p53, KRAS, CTNNB1, ARID1A and ARID5B.

Genetic instability Transition state Loss of viral dependency
Time

HIT:
Viral infection

RUN:
Loss of viral genome

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**Hit and run theory:**
- **HIT:** Viral infection
- **RUN:** Loss of viral genome

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**Time**
- Potentially a biologically distinct subgroup.
- Possible low responses to standard treatment.
- New therapeutic targets.

**Future research focus**
*Report on clinical outcomes
*Evaluate the overall response rates to specific treatments
*Consider new biomarkers

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