Advancing Care in Adenoid Cystic Carcinoma

Adenoid cystic carcinoma (ACC) is a rare cancer that most commonly arises in the salivary glands of the head and neck. ACC is characterized by a prolonged clinical course and a high risk of local recurrence and distant metastases, often requiring lifelong monitoring.[1]

Affects
~11K
people in the U.S. alone.[1]

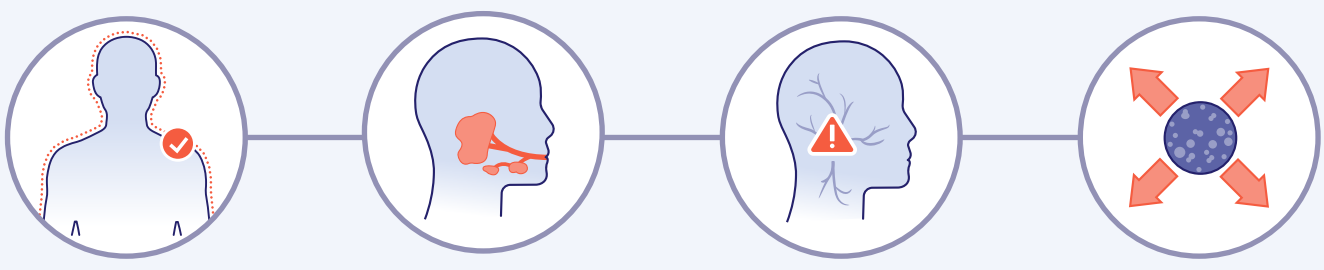
Typically occurs around the age of
40–60
years old.[2]

~50%
of patients eventually develop aggressive disease with distant metastases.[1]

Overall survival
< 3 YEARS
for aggressive ACC.[1]

ACC May Present with a Range of Symptoms

High Unmet Medical Need



Early Stages

- Can be asymptomatic[3]

When Impacting the Salivary Glands

- Facial numbness[3]
- Muscle weakness in the face[3]
- Lump or swelling[3]
- Difficulty chewing, swallowing or speaking[3]

Advanced Stages

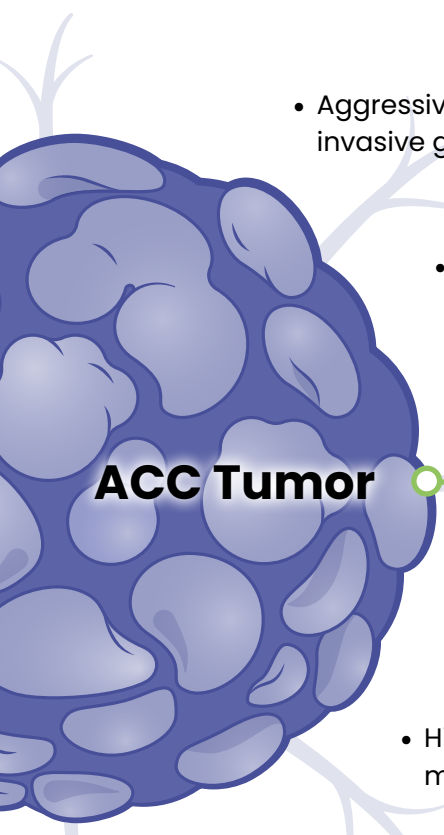
- Dull pain[3]
- Altered sensation of the tongue or face[3]
- Facial paralysis[3]

Metastases

Varies depends on size and location of tumors. May include:

- Vision changes[3]
- Difficulty breathing or hoarseness[3]
- Tender, painful mass in the breast[3]

Biological Features of ACC Drive Disease Progression & Treatment Challenges



- Aggressive and invasive growth[4]
- Perineural invasion (tumor cells spread along nerves)[4]
- High rate of recurrence, even after initial treatment[4]
- High rate of distant metastasis[4]
- Surrounding environment contributes to tumor growth and spread[4,5]
- Few immune cells are present, and those that are may have limited ability to effectively attack the tumor[5]

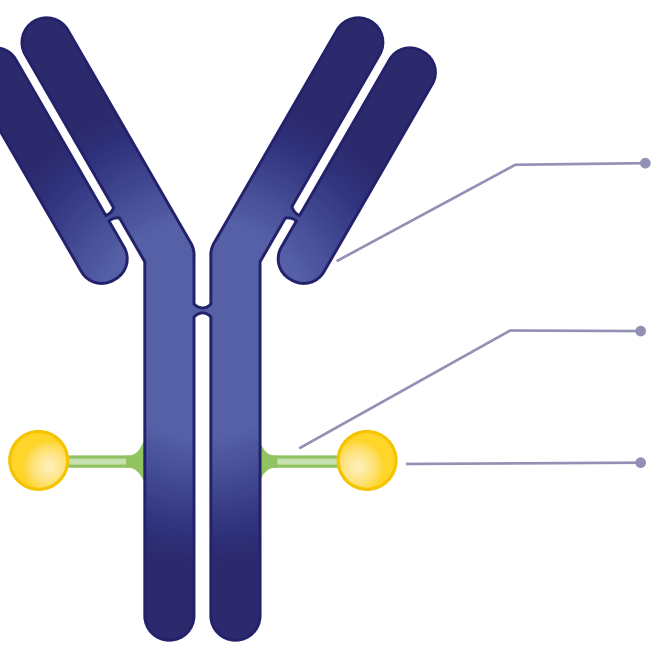
B7-H4 is a surface protein highly expressed in ACC, with low expression in healthy tissue; a negative prognostic factor, highly expressed in the more aggressive phenotype.[6]

Surgery, often followed by radiation, is the primary treatment for ACC.[3]
Despite the high unmet medical need, there is **no approved systemic therapy** for individuals living with advanced or metastatic ACC today.

Innovation in Antibody-Drug Conjugates

Scientists are exploring new approaches to cancer treatment that could precisely target malignant ACC cells. **Antibody-drug conjugates (ADCs)** are one such area of research.

ADCs Combine Targeting & Treatment in a Single Approach



ADCs are designed to deliver treatment directly to cancer cells. They combine three key components:

Antibody
Helps guide the ADC to a specific protein (antigen) on the surface of cancer cells

Linker
Connects the antibody to the payload

Payload
A therapeutic designed to disrupt essential processes in the cell with the aim of leading to cancer cell death

After binding to the target tumor cell, the ADC is internalized, the antibody and linker are degraded and the payload is released within the tumor cell.

Proteins on ACC Tumors Cells May Enable Targeted Approaches Like ADCs

Because specific proteins, such as B7-H4, are often present on ACC tumor cells, ADCs represent an important area of promising investigational approaches that may help direct treatment to cancer cells.

For more Information about ACC, visit the Adenoid Cystic Carcinoma Research Foundation at **ACCRF.org**.

References:

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3. Chhiber N. Adenoid cystic carcinoma. Cancer Therapy Advisor. Published February 11, 2026. Accessed April 29, 2026. https://www.cancertherapyadvisor.com/ddi/adenoid-cystic-carcinoma/.
4. Dantas AN, et al., Clinicopathological characteristics and perineural invasion in adenoid cystic carcinoma: a systematic review. Brazilian Journal of Otorhinolaryngology. 2015;81(3):329-335.
5. Wang X, et al. Heterogeneous immune landscapes and macrophage dynamics in primary and lung metastatic adenoid cystic carcinoma of the head and neck. Front Immunol. 2024;15. doi: 10.3389.fimmu.2024.1483887.