Grade 3 (High Grade) Oral Cancer:

Treatment Methods:

Surgery:

1. **More extensive surgery**: For Grade 3 oral cancer, surgery may be more extensive, potentially involving the removal of parts of the jawbone or tongue. Lymph node dissection is often necessary if the cancer has spread to the lymphatic system. The goal is to achieve clear margins and remove all visible cancer. Recovery may require reconstructive surgery to restore oral function and appearance, along with intensive rehabilitation. Post-surgery, patients are closely monitored for any signs of recurrence and managed for potential complications such as infection, difficulty eating, and speech issues.

Radiation Therapy:

1. **Combined with chemotherapy (chemoradiation)**: Radiation therapy is often combined with chemotherapy for high-grade oral cancers to enhance treatment effectiveness. This combination, known as chemoradiation, aims to destroy cancer cells more effectively than either treatment alone. Radiation targets the tumor directly, while chemotherapy sensitizes cancer cells to the effects of radiation. This approach is especially useful for shrinking tumors before surgery or treating inoperable tumors. Side effects can be more pronounced and may include fatigue, skin changes, and mucositis, but they are managed with supportive care.

Chemotherapy:

1. **More aggressive regimens**: High-grade oral cancers often require more aggressive chemotherapy regimens compared to lower-grade cancers. Treatment may involve higher doses or more frequent administration of drugs to control the rapid growth and spread of cancer cells.
2. **Combination therapies**: Using more than one drug in combination is common for treating Grade 3 cancers. This multi-drug approach targets cancer cells in different ways, improving treatment efficacy. Common drugs used include Cisplatin, Carboplatin, and 5-fluorouracil (5-FU), often combined with newer agents. Side effects are managed with supportive treatments, and therapy is closely monitored to adjust dosages and schedules as needed.

Targeted Therapy:

1. **Cetuximab combination**: Cetuximab may be used in combination with radiation or chemotherapy for advanced cancers. Cetuximab targets the epidermal growth factor receptor (EGFR), inhibiting cancer cell growth and proliferation. This targeted approach enhances the effects of other treatments and may improve outcomes for patients with high-grade oral cancers. It is particularly beneficial for patients whose tumors overexpress EGFR. Side effects are generally manageable and include skin reactions and infusion-related symptoms.

Immunotherapy:

1. **Beneficial for high-grade cancers**: Immunotherapy can be particularly beneficial for high-grade oral cancers, especially those that do not respond well to other treatments. Drugs like Pembrolizumab (Keytruda) and Nivolumab (Opdivo) help the immune system recognize and attack cancer cells by blocking proteins that inhibit immune response. Immunotherapy offers a promising option for patients with advanced or recurrent cancers, providing durable

responses in some cases. Side effects may include immune-related reactions, which are managed with careful monitoring and supportive care.

Clinical Trials:

1. **Participation in new therapies**: Patients with high-grade oral cancer may be offered participation in clinical trials testing new therapies, including novel drugs, combinations, or techniques. Clinical trials provide access to cutting-edge treatments that are not yet widely available and contribute to advancing medical knowledge. Participation is voluntary, and patients are carefully informed about the potential risks and benefits. Trials may offer new hope for patients with limited treatment options, potentially improving outcomes and advancing the field of cancer treatment.