

Table S1 Summary of histological types of salivary gland cancers (SGCs) and advances in immunotherapy and antiangiogenic therapy

Histological Subtypes *	Current treatment principle	Study	Histological subtypes	Therapy	ORR (%)
Mucoepidermoid carcinoma (MEC)	①For resectable SGCs, the standard of care is surgical resection with or without postoperative radiotherapy. ②For advanced SGCs, there is no proven standard of care.	Immunotherapy			
Adenoid cystic carcinoma (ACC)		Niwa et al. [12]	SDC, Adenocarcinoma, ACC, MEC	Nivolumab	4.2
Acinic cell carcinoma (AcCC)		Cohen et al. [13]	Adenocarcinoma, MEC, Undifferentiated carcinoma, SCC, ACC	Pembrolizumab	12
Polymorphous adenocarcinoma					
Clear cell carcinoma (CCC)					
Basal cell adenocarcinoma					
Intraductal carcinoma		Mahmood et al. [14]	ACC	Pembrolizumab vs Pembrolizumab + RT	0
Adenocarcinoma, not otherwise specified					
Salivary duct carcinoma (SDC)					
Myoepithelial carcinoma (MECA)					
Epithelial-myoepithelial carcinoma (EMC)		Rodriguez et al. [15]	ACC, AcCC, MEC, Adenocarcinoma, LEC	Pembrolizumab + Vorinostat	16
Carcinoma ex pleomorphic adenoma (Ca ex PA)					
Secretory carcinoma					
Sebaceous carcinoma					
Carcinosarcoma	Antiangiogenic therapy				
Poorly differentiated carcinoma	Tchekmedyian et al. [16]	ACC	Lenvatinib	15.6	
Undifferentiated carcinoma	Locati et al. [17]	Adenocarcinoma, Poorly differentiated carcinoma, AcCC, CCC	Axitinib	8	
Large cell neuroendocrine carcinoma					
Small cell neuroendocrine carcinoma					
Lymphoepithelial carcinoma (LEC)					
Squamous cell carcinoma					
Oncocytic carcinoma					

Uncertain malignant potential Sialoblastoma	Locati et al. [18]	ACC, MEC, Adenocarcinomas, SDC, Poorly differentiated carcinoma, MECA	Sorafenib	16
	Chau et al. [19]	ACC	Sunitinib	0
	Keam et al. [20]	ACC	Dovitinib	3.1
	Immunotherapy plus antiangiogenic therapy			
	NCT04209660[21]	ACC and Other SGCs	Lenvatinib + Pembrolizumab	NR

Abbreviation: ORR: objective response rate; NR: Not Reported. *Histological classification of Salivary gland cancers according to the 2017 WHO classification of head and neck cancers.