

Policy Statement 6.31 – Salivary Diagnostics

Position Summary

The use of non-invasive salivary diagnostics by dentists to detect and monitor oral and systemic diseases is encouraged.

1. Background

- 1.1. Fluid from the oral cavity contains secretions from the major and minor salivary glands, nasopharyngeal secretions, gingival crevicular fluid, desquamated epithelial cells and the oral microbiome as well as a wealth of molecular constituents. Over the past ten to fifteen years, salivary diagnostics has generated significant interest and attention worldwide, as thousands of proteins and metabolites have been identified.
- 1.2. Emerging evidence indicates that saliva is a potentially useful diagnostic biofluid to screen for and assess the risk of oral and systemic diseases and enables us to monitor therapies, therapeutic outcomes and disease progression in cancer.
- 1.3. The use of saliva to detect and monitor oral and systemic diseases through non-invasive means is a highly desirable goal in health care.
- 1.4. Advances in precision medicine, i.e., individually developed treatment plans based on genetic make-up are becoming more pertinent in health care.
- 1.5. A number of salivary tests are currently available to screen for specific infectious agents e.g. HIV, HPV, HSV, Candida, certain hormones, genetic health markers and detection of illicit drugs.
- 1.6. A saliva database generated from studies on oral and systemic diseases has been constructed to facilitate data accessibility, sharing and usage among researchers, educators and clinicians for further developing salivary diagnostics.
- 1.7. Clinical validation of salivary biomarkers for detection of oral and systemic diseases must take place before these tests can be relied upon.

2. Position

- 2.1. Dentists should be aware of the existence of saliva testing and their potential value and implications in clinical practice.
- 2.2. Further basic, translational and clinical studies regarding the use of saliva for diagnostic purposes are required.
- 2.3. Dentists are ideally positioned and must be recognised as having an important role within the health care team with respect to salivary testing
- 2.4. Currently, there are no salivary diagnostic tests available in Australia for evaluating the risk of caries, periodontal disease or head and neck cancer.

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Adopted by ADA Federal Council, November 13/14, 2014.

Amended by ADA Federal Council, November 9/10, 2017.

Amended by ADA Federal Council, April 23, 2021.

Appendix to Policy Statement 6.31 – Salivary Diagnostics

Glossary

A Biomarker is a measurable indicator of the severity or presence of some disease state. More generally a biomarker is anything that can be used as an indicator of a particular disease state or some other physiological state of an organism.

Epithelium is membranous tissue composed of one or more layers of cells separated by very little intercellular substance and forming the covering of most internal and external surfaces of the body and its organs.

Metabolites are the intermediates and products of metabolism and usually small molecules. They have various functions, including fuel, structure, signalling, stimulatory and inhibitory effects on enzymes, catalytic activity of their own (usually as a cofactor to an enzyme), defence, and interactions with other organisms.

Microflora are living microorganisms that are so small that they can be seen only with a microscope and that maintain a more or less constant presence in a particular area.

Ontology is a branch of metaphysics concerned with the nature or essence and relations of being, the opposite of phenomenology, the science of phenomena.