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(71) Applicant: **THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES** [US/US]; Office of Technology Transfer, National Institutes of Health, 6701 Rockledge Drive, Suite 700, MSC 7788, Bethesda, Maryland 20892-7788 (US).

(72) Inventors: **CHIORINI, John A.**; 14651 Viburnum Drive, Dayton, Maryland 21036 (US). **HOFFMAN, Matthew P.**; 30 Convent Drive, Building 30 Room 5A507, Bethesda, Maryland 20814 (US).

(74) Agent: **HEFNER, M. Daniel** et al.; Leydig, Voit & Mayer, Ltd., Two Prudential Plaza, Suite 4900, 180 North Stetson Avenue, Chicago, Illinois 60601 (US).

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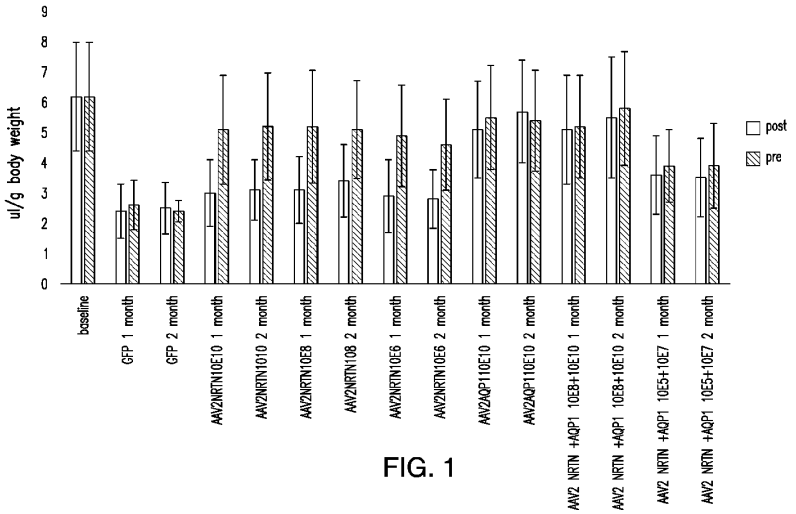


FIG. 1

(57) Abstract: Administration of aquaporin-1 (AQP1) complementary deoxyribonucleic acid (cDNA) to a salivary gland prior to treatment with ionizing radiation (IR) prevents the subsequent IR-induced loss in function. The administration of AQP1 (e.g., human AQP1; hAQP1) prior to IR treatment (e.g., in patients with head and neck cancer) can reduce or prevent IR-induced salivary hypofunction, resulting in an elevated salivary output.

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