

Review

Covid-19 Pandemic: What Changes for Dentists and Oral Medicine Experts? A Narrative Review and Novel Approaches to Infection Containment

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Chimera A

H2A		LiP2a		LiP0		H2A		LiP2a		LiP0		LACK				CPC							
KKRCRLNPR	DDISSLLKNVTLSHS	AAKVISAMPAASSGAA	MSTKYLAAY	VDAFNLLAVSVATSYEF	AHRVKAPAR	KKRCRLNPR	DDISSLLKNVTLSHS	AAKVISAMPAASSGAA	MSTKYLAAY	VDAFNLLAVSVATSYEF	AHRVKAPAR	DRSIRMWDLRNGQCQ	WSADGNTLY	ATERSLSVY	DRSIRMWDLRNGQCQ	WSADGNTLY	ATERSLSVY	GYLYSGKSL	WTASADNGY	LVKYKGGTYSYVKGE	GYLYSGKSL	WTASADNGY	LVKYKGGTYSYVKGE

Chimera B

CPA						CPB						PSA-50S						A2					
RPDFMNMTPRGVPLE	AKRRRLPTT	MTEDYMGMY	RPDFMNMTPRGVPLE	AKRRRLPTT	MTEDYMGMY	SKKFSHPSL	AGALVMGTALLTESA	RTDRQSCLY	SKKFSHPSL	AGALVMGTALLTESA	RTDRQSCLY	DSWSRQLGLTSLTSL	LPPEWAAMP	LTDERTCLV	DSWSRQLGLTSLTSL	LPPEWAAMP	LTDERTCLV	GKGLRAPPL	GPHLRGGAVTSSVVT	SQAGDVFAL	GKGLRAPPL	GPHLRGGAVTSSVVT	SQAGDVFAL

GPGPG linker

Figure S1. Illustration of the Chimera’s constructions. The multi-epitope vaccine sequence consisting of 24 MHC class I and II ligands. GPGPG sequence was used as linker to join the epitopes. H2A= Histone protein 2, LiP2a = Acid ribosomal protein P2, LiP0 = Acid ribosomal protein P0, LACK = *Leishmania* homologue of activated C kinase, CPC = Cysteine peptidase C, CPA = Cysteine peptidase A, CPB = Cysteine peptidase B, PSA-50S = Surface antigenic protein, A2 = Amastigote protein A2

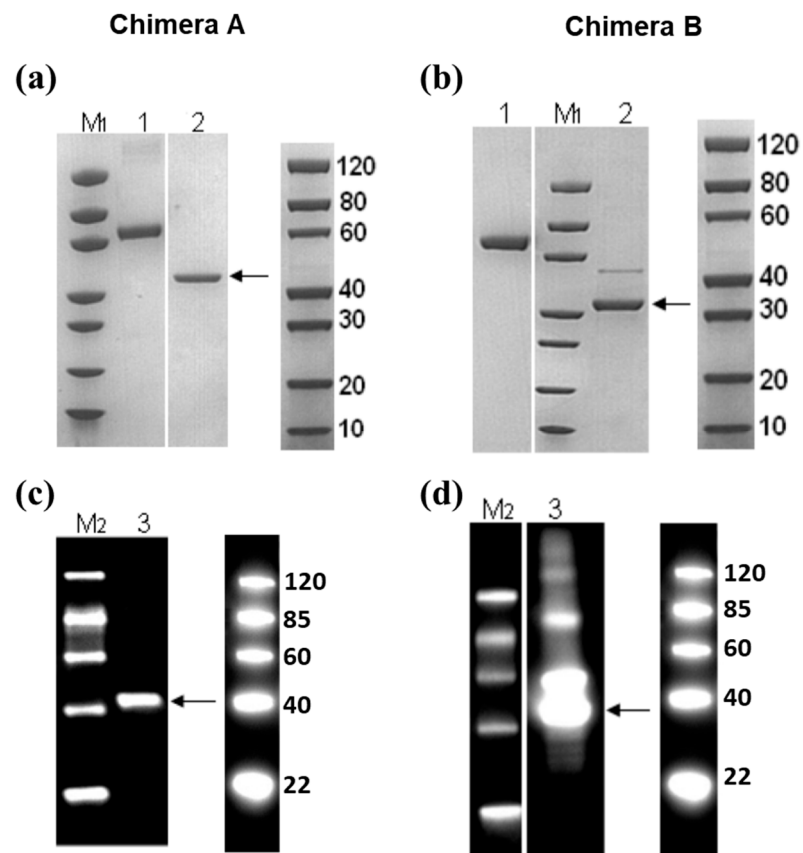


Figure S2. Evaluation of the expression of chimeric proteins A and B in the *E. coli* system. The expression was confirmed by SDS-PAGE as described in (a) and (b) for Chimeras A and B respectively. M1 = protein marker 1 (120 to 10 kDa); 1 = Bovine Serum Albumin (2 µg); 2 = 2 µg of chimeric protein A (~40 kDa) or B (~38 kDa). Also, the expression of the Chimera A (c) and Chimera B (d) was confirmed by Western Blot using anti-His antibody. M2 = protein marker 2 (120 to 22 kDa); 3 = 2 µg of chimeric protein A (c) and B (d).

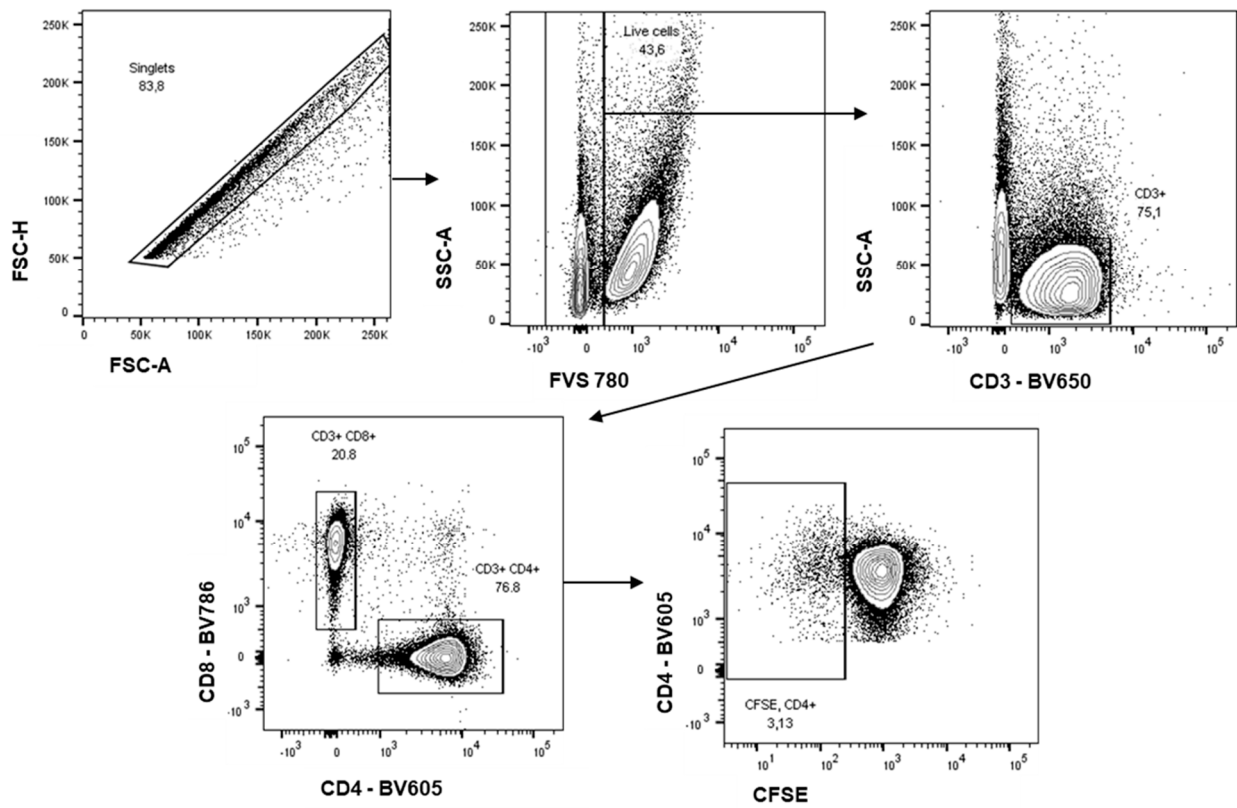


Figure S3. Representative plot of the gating strategy for CFSE-labelled cells to evaluate the proliferation of splenocytes. The first step was to select the single cells, then the live cells using (FVS780). To characterize the T-lymphocytes anti-CD3, anti-CD4 and anti-CD8 were used followed by the proliferation analyses selecting the CFSE^{low}-labelled cells.