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**Supplemental information**

**Clonal hematopoiesis driven by mutated DNMT3A  
promotes inflammatory bone loss**

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SUPPLEMENTAL TABLES (S1 – S3)

<b>Table S1. Prevalence of CHIP mutations according to variant allele frequency (VAF) among the Dental ARIC participants (n=4,946) – Related to Table 1</b>		
Participants with CHIP	>2% VAF carriers	>10% VAF carriers
	<i>n</i> (column %)	<i>n</i> (column %)
All	191 (100); 3.9% of sample	108 (100); 2.2% of sample
<i>DNMT3A</i> mutation carriers	118 (61.8)	72 (66.7)
<i>TET2</i> mutation carriers	24 (12.6)	8 (7.4)
<i>ASXL1</i> mutation carriers	17 (8.9)	16 (14.8)
<i>JAK2</i> mutation carriers	2 (1.1)	1 (0.9)
Other ( <i>PPM1D, SF3B1, SRSF2, TP53</i> )	30 (15.7)	11 (10.2)

<b>Table S2. Descriptive information of Dental ARIC study participants with clinical and CHIP data (n=4,946) – Related to Table 1</b>				
	CHIP carriers	CHIP non-carriers	<i>DNMT3A</i> mutation carriers	<i>DNMT3A</i> mutation non-carriers
	<i>n</i> (row %)	<i>n</i> (row %)	<i>n</i> (row %)	<i>n</i> (row %)
<b>CHIP: Any</b>	191 (3.9)	4,755 (96.1)	118 (2.4)	4,828 (97.6)
<b>Age: years, mean [SD]</b>	64.5 [5.4]	62.3 [5.6]	64.1 [5.6]	62.3 [5.6]
<b>Sex</b>				
male	86 (3.9)	2,143 (96.1)	65 (2.4)	2,652 (97.6)
female	105 (3.9)	2,612 (96.1)	53 (2.4)	2,176 (97.6)
<b>Race</b>				
European American	138 (3.6)	3,736 (96.4)	79 (2.0)	3,795 (98.0)
African American	53 (4.9)	1,019 (95.1)	39 (3.6)	1,033 (96.4)
<b>Education level</b>				
Basic	30 (4.4)	648 (95.6)	19 (2.8)	659 (97.2)
Intermediate	70 (3.3)	2,029 (96.7)	40 (1.9)	2,059 (98.1)
Advanced	90 (4.2)	2,075 (95.8)	59 (2.7)	2,106 (97.3)
<b>Current smoker</b>				
no	154 (3.6)	4,155 (96.4)	92 (2.1)	4,217 (97.9)
yes	35 (5.7)	582 (94.3)	25 (4.1)	592 (95.9)
<b>Diabetic</b>				
no	166 (3.9)	4,065 (96.1)	103 (2.4)	4,128 (97.6)
yes	23 (3.4)	656 (96.6)	14 (2.1)	665 (97.9)
<b>Body mass index (BMI)</b>				
<25.0 kg/m <sup>2</sup>	58 (4.6)	1,191 (95.4)	38 (3.0)	1,211 (97.0)
25.0-29.9 kg/m <sup>2</sup>	74 (3.7)	1,938 (96.3)	43 (2.1)	1,969 (97.9)
≥30.0 kg/m <sup>2</sup>	59 (3.5)	1,615 (96.5)	37 (2.2)	1,637 (97.8)
<b>Episodic dental care</b>				
no	131 (3.7)	3,410 (96.3)	15 (0.4)	3,526 (99.6)
yes	59 (4.3)	1,320 (95.7)	9 (0.7)	1,370 (99.3)

**Table S3. Associations between periodontal disease diagnoses, clinical measures of periodontal disease according to DNMT3A mutation carrier status obtained from marginal effects estimation\* - Related to Table 1**

	crude model p.p. (95% CI)	sex adjusted p.p. (95% CI)	sex + age adjusted p.p. (95% CI)
<b>Periodontitis diagnosis</b> (reference: Stages I and II)			
Stage IV	13.0 (2.3, 23.7)	12.8 (2.1, 23.5)	10.8 (0.0, 21.5)
<b>Clinical attachment loss</b>			
(% of sites with CAL ≥3 mm)	5.4 (1.0, 9.8)	5.4 (1.1, 9.7)	4.9 (0.6, 9.2)
<b>Gingival inflammation</b>			
(% of sites with gingiva index ≥1)	8.8 (1.0, 16.5)	8.7 (1.0, 16.4)	9.2 (1.5, 17.0)
*Crude, sex-, and sex- and age-adjusted logistic and linear regression models and average marginal effects (percentage points, p.p.) and associated 95 confidence intervals (CI).			