

**The apical root canal system microbial communities determined by next-generation sequencing.**

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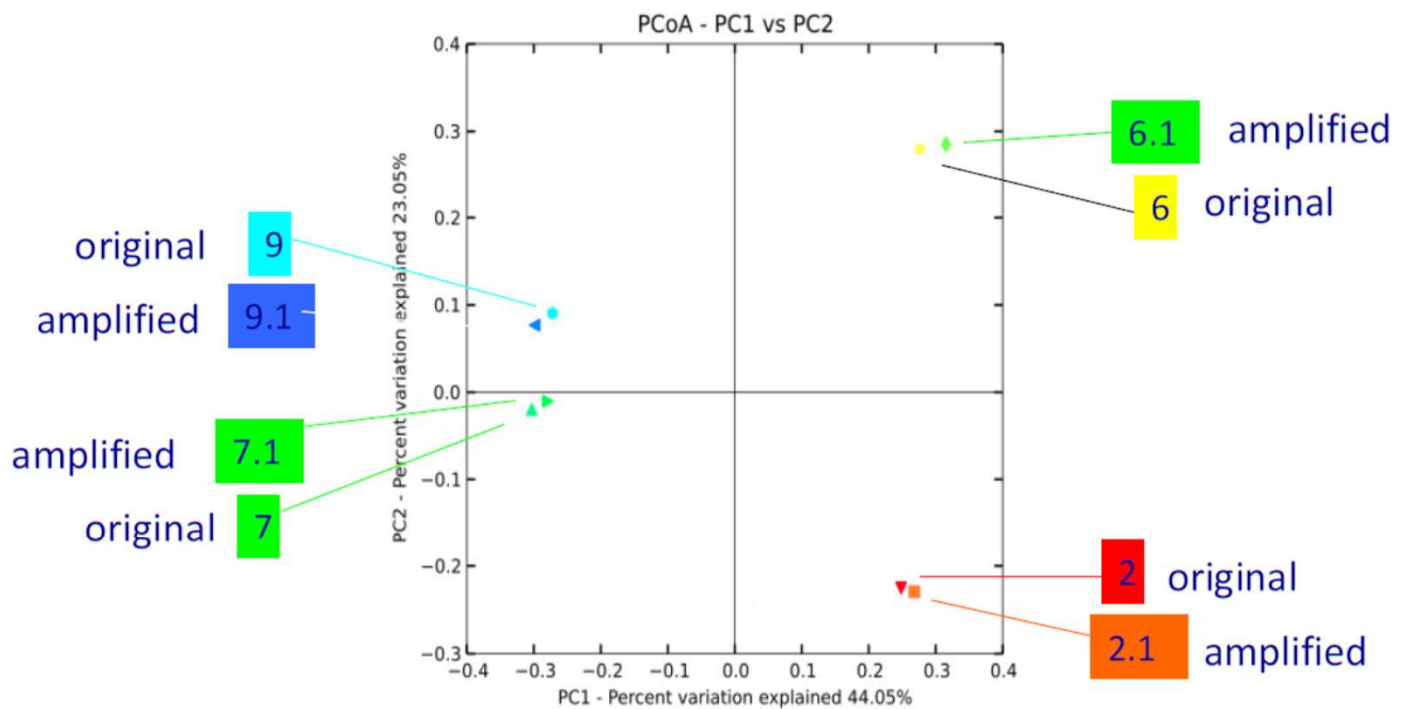
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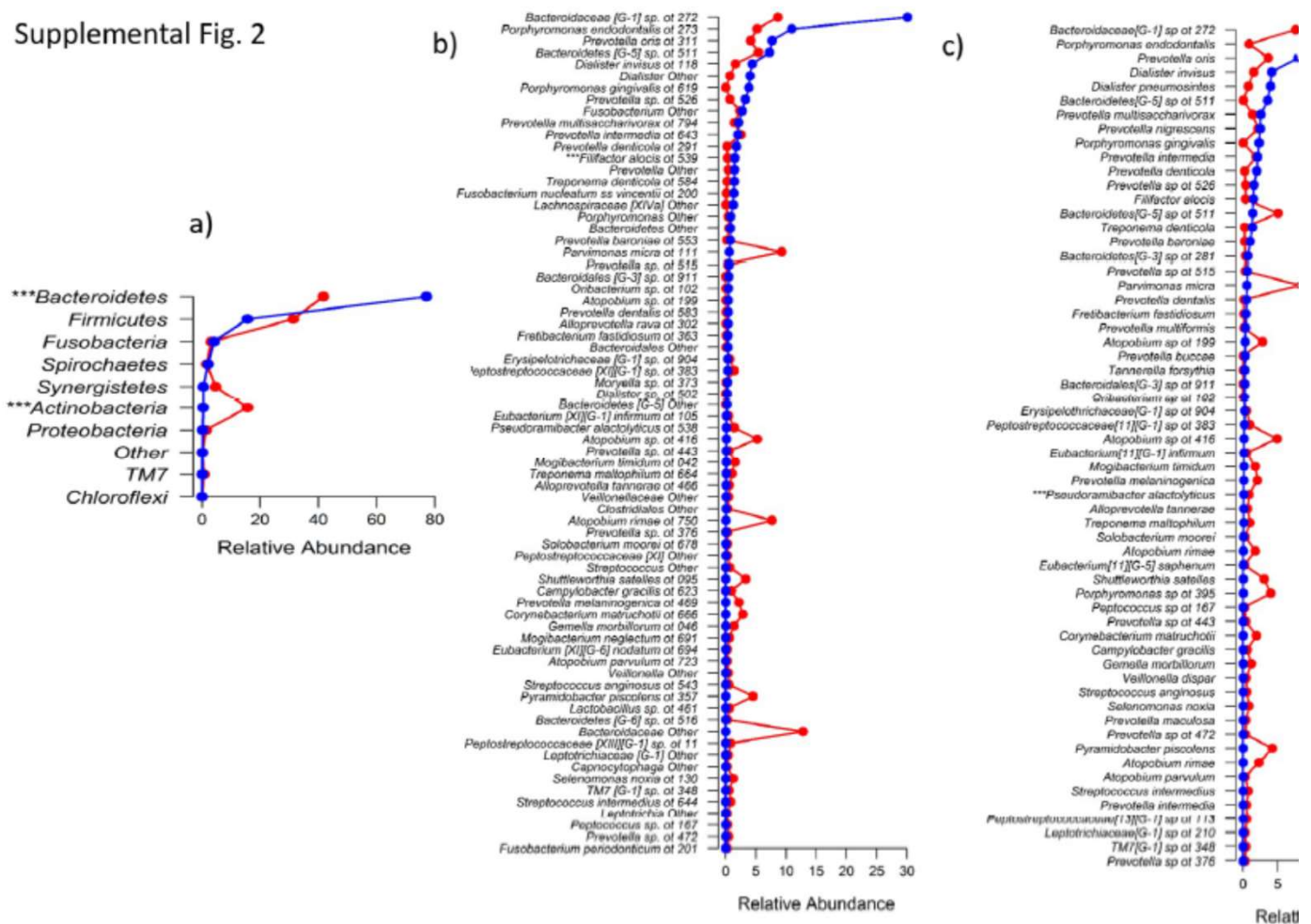
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*Supplemental Figure 1:* Principal coordinate analysis (PCoA) based on unweighted UniFrac distances obtained from the QIIME analytical pipeline comparing four samples that were amplified by MDA (samples number 2.1, 6.1, 7.1, 9.1) to their non-amplified source sample (2, 6, 7, 9, respectively).

Supplemental Fig. 2



*Supplemental Figure 2:* Line plots of the mean microbial composition of the samples in which a cavity was open (blue) or closed (red) at the time of sampling, at the phylum (a), genus (b) and species levels (c). Graphs show mean relative abundance for phyla that were 0.01% different, genera that were 0.1% different, and species that were 0.2% different. Taxa were sorted according to relative abundance in the positive group. \*\*\*Taxa with statistically significant differences ( $p \leq 0.05$ ).

*Supplemental table*

# Clinical Parameters

| Amplified | open/closed | presence/<br>absence | lesion size | symptomatic/ | presence/<br>absence | Male/  | Age | Single<br>/multiple |
|-----------|-------------|----------------------|-------------|--------------|----------------------|--------|-----|---------------------|
| sample    | cavity      | lesion               | small/large | asymptomatic | sinus tract          | female |     | root                |
| L2        | closed      | absence              | -           | asymptomatic | absence              | F      | 32  | multi               |
| L6        | closed      | absence              | -           | symptomatic  | absence              | F      | 26  | multi               |
| L7        | open        | presence             | large       | symptomatic  | absence              | M      | 31  | multi               |
| L9        | open        | presence             | small       | asymptomatic | absence              | F      | 56  | multi               |
| L10       | closed      | presence             | large       | asymptomatic | absence              | F      | 39  | multi               |
| L16       | closed      | absence              | -           | asymptomatic | absence              | M      | 56  | multi               |
| L20       | open        | presence             | small       | symptomatic  | absence              | F      | 53  | single              |
| L24       | closed      | absence              | -           | asymptomatic | absence              | M      | 69  | single              |
| L25       | closed      | presence             | large       | symptomatic  | presence             | M      | 39  | multi               |
| L28       | closed      | presence             | large       | symptomatic  | absence              | F      | 21  | multi               |
| L29       | closed      | absence              | -           | asymptomstic | absence              | F      | 14  | multi               |
| L34       | closed      | presence             | small       | symptomatic  | presence             | F      | 41  | multi               |
| L36       | open        | presence             | large       | symptomatic  | absence              | F      | 43  | multi               |
| L40       | closed      | presence             | small       | symptomatic  | absence              | M      | 65  | single              |
| L42       | closed      | presence             | large       | symptomatic  | absence              | F      | 12  | multi               |
|           |             |                      |             |              |                      |        |     |                     |