## Supplementary Materials: Quantitative Analysis of Selected Microorganisms Present at Various Sites in A Prosthetics Clinic and Dental Laboratory During Complete Denture Fabrication

| Que  | stionnaire: Clinicians and students                                      |         |      |         |             |
|------|--|---------|------|---------|-------------|
| Acad | emic status: Staff Postgraduate student                                  |         | Unde | ergradu | ate student |
| Ques | stions: Please circle your answer  |         |      |         |             |
| 1    | Is infection control important while performing Prosthodontic treatment? | Yes     |      | No      | Don't know  |
| 2    | Have you been vaccinated for Hepatitis B?                                | Yes     |      | No      | Don't know  |
| 3    | Can Hepatitis B be transmitted through saliva?                           | Yes     |      | No      | Don't know  |
| 4    | Can Tuberculosis be transmitted through saliva?                          | Yes     |      | No      | Don't know  |
| 5    | Can HIV be transmitted through saliva?                                   | Yes     |      | No      | Don't know  |
| 6    | Do you wash your hands before and after patient examin                   | ation?  | Yes  | No      | Sometimes   |
| 7    | If "yes" or "sometimes":   |         |      |         |             |
|      | What do you wash your hands with?  |         |      |         |             |
|      |  |         |      |         |             |
| 8    | Do you use gloves during prosthodontic treatment?                        | Yes     | No   | Somet   | times       |
| 9    | Do you rinse impressions with water before sending to the                | ne lab? | Yes  | No So   | metimes     |
| 10   | Do you disinfect your impressions before sending to the I                | ab?     | Yes  | No      | Sometimes   |
|      | If "yes" or "sometimes":  a. What type of disinfectant is it?            |         |      | OR:     | Don't know  |
|      | b. What is the trade name?   |         |      | OR:     | Don't know  |
|      | c. What is its composition (chemical contents)?                          |         |      |         |             |
|      |  |         |      | OR:     | Don't know  |
| 11   | Do you just rinse the trial bases, dentures etc. with tap w              | ater?   | Yes  | No      | Sometimes   |

| 12 | Is rinsing with tap water sufficient to remove contaminants?                                    | Yes | No  | Don't know |
|----|---|-----|-----|------------|
| 13 | When you send a procedure to the laboratory, do you inform them if you have disinfected or not? | Yes | No  | Sometimes  |
| 14 | Does the lab inform you if their work has been disinfected?                                     | Yes | No  | Sometimes  |
| 15 | Have you received training on how to disinfect at each stage of denture fabrication process?    | the | Yes | No         |
| 16 | Are you aware of the infection control procedures indicated in "The Pros Book"?                 |     | Yes | No         |
| 17 | Do you feel the infection control procedures you use are adequate?                              | Yes | No  | Don't Know |
| 18 | Are you aware of the infection control procedures used in the dental laboratory?                |     | Yes | No         |
| 19 | Do you feel the laboratory infection control procedures are adequate?                           | Yes | No  | Don't know |
| 20 | Please feel free to add any other comment:  |     |     |            |

## Questionnaire – Dental laboratory staff

## Questions: Please circle your answer

| 1  | Does the laboratory have an infection control (disinfection protocopolicy for work coming from the clinics? | ol)<br>Yes | No      | Don't know |
|----|---|------------|---------|------------|
| 2  | Can infections be transmitted through dental procedures?  | Yes        | No      | Don't know |
| 3  | Is infection control important in dentistry?  | Yes        | No      | Don't know |
| 4  | Have you been vaccinated for Hepatitis B?   | Yes        | No      | Don't know |
| 5  | Can Hepatitis B be transmitted through saliva?  | Yes        | No      | Don't know |
| 6  | Can Tuberculosis (TB) be transmitted through saliva?  | Yes        | No      | Don't know |
| 7  | Can HIV be transmitted through saliva?  | Yes        | No      | Don't know |
| 8  | Is infection control important while performing dental laboratory procedures?                               | Yes        | No      | Don't know |
| 9  | Do you wear gloves when working in the laboratory?  | Yes        | No      | Sometimes  |
| 10 | Do you wear a mask when working in the laboratory?  | Yes        | No      | Sometimes  |
|    | If "Yes" or "sometimes", for what procedures?   |            |         |            |
|    |   |            |         |            |
| 11 | Do you wear eye protection when working in the laboratory?  | Yes        | No      | Sometimes  |
|    | If "Yes" or "sometimes":, for what procedures?  | •••••      |         |            |
|    |   | •••••      |         |            |
| 12 | Do you feel the need for your work surfaces to be disinfected?  | Yes        | No      | Don't know |
| 13 | Do you in fact disinfect your laboratory surfaces? Yes  | No         | Sometii | nes        |
|    | If "Yes" or "sometimes": give the name of disinfectant you use:   |            |         |            |
|    |   | •••••      | OR:     | Don't know |
| 14 | Are you informed if the work received from the clinic has been disinfected?                                 | Yes        | No      | Sometimes  |
| 15 | Do you disinfect work received from the clinic? Yes   | No         | Someti  | mes        |
|    | If Yes or "sometimes", how do you disinfect:  |            |         |            |

|    | (a) Alginate impressions:  |
|----|--|
|    | (b) Rubber- base impressions:  |
|    | (c) Denture bases (Jaw reg, trial bases etc.):   |
| 16 | Do you disinfect work you send back to the clinic? Yes No Sometimes                      |
|    | (a) If Yes or "sometimes", how:  |
|    |  |
| 17 | Do you disinfect rag wheels, burs, brushes before polishing? Yes No Sometimes            |
|    | (a) If Yes or "sometimes", how:  |
|    |  |
| 18 | Do you feel the laboratory infection control procedures are adequate? Yes No Don't know  |
| 19 | Do you inform the clinic if the work you send out has been disinfected? Yes No Sometimes |
| 20 | Do you use fresh pumice each time you polish a denture? Yes No Sometimes                 |
| 21 | Please feel free to add any other comment:   |

**Table 1.** Level of microbial contamination in the dental clinic during denture fabrication.

|                       |    | Quantity       |                | % samples with organisms |              |           |         |         |
|-----------------------|----|----------------|----------------|--------------------------|--------------|-----------|---------|---------|
| Site                  | n  | cfu/swab       | Mixed<br>flora | Streptococci             | Lactobacilli | S. aureus | AGNB    | Candida |
| Primary               | 10 | 0              | 0              | 0                        | 60           | 60        | 20      | 70      |
| impression before     |    | 1-10           | 0              | 10                       | 0            | 40        | 20      | 20      |
| disinfection          |    | 11-100         | 20             | 20                       | 30           | 0         | 30      | 10      |
|                       |    | >100           | 80             | 70                       | 10           | 0         | 30      | 0       |
| Primary cast from     | 10 | 0              | 0              | 30                       | 100          | 60        | 30      | 30      |
| lab                   |    | 1-10           | 50             | 30                       | 0            | 30        | 60      | 60      |
|                       |    | 11-100         | 20             | 30                       | 0            | 10        | 10      | 10      |
|                       |    | >100           | 30             | 10                       | 0            | 0         | 0       | 0       |
| Final impression      | 10 | 0              | 10             | 10                       | 80           | 80        | 90      | 80      |
| before disinfection   | 10 | 1-10           | 40             | 40                       | 20           | 20        | 10      | 20      |
| before distillection  |    | 11-100         | 20             | 20                       | 0            | 0         | 0       | 0       |
|                       |    |                |                |                          |              |           |         |         |
|                       |    | >100           | 30             | 30                       | 0            | 0         | 0       | 0       |
| Final cast after jaw  | 10 | 0              | 0              | 30                       | 100          | 90        | 80      | 80      |
| registration          | -  | 1-10           | 50             | 30                       | 0            | 10        | 10      | 20      |
| 0                     |    | 11-100         | 0              | 20                       | 0            | 0         | 10      | 0       |
|                       |    | >100           | 50             | 20                       | 0            | 0         | 0       | 0       |
| Bases for jaw         | 10 | 0              | 50             | 60                       | 100          | 100       | 90      | 90      |
| registration from     | 10 | 1-10           | 30             | 30                       | 0            | 0         | 0       | 0       |
| lab                   |    | 11-100         | 20             | 0                        | 0            | 0         | 0       | 0       |
| iab                   |    | >100           | 0              | 10                       | 0            | 0         | 10      | 10      |
|                       |    |                |                |                          |              |           |         |         |
| Bases for jaw         | 10 | 0              | 0              | 0                        | 70           | 50        | 50      | 50      |
| registration clinic   |    | 1-10           | 0              | 0                        | 20           | 30        | 10      | 40      |
| before disinfection   |    | 11-100         | 30             | 40                       | 10           | 20        | 20      | 10      |
|                       |    | >100           | 70             | 60                       | 0            | 0         | 20      | 0       |
| Articulator from      | 10 | 0              | 10             | 30                       | 100          | 50        | 70      | 60      |
| lab                   |    | 1-10           | 50             | 60                       | 0            | 40        | 30      | 40      |
|                       |    | 11-100         | 30             | 10                       | 0            | 10        | 0       | 0       |
|                       |    | >100           | 10             | 0                        | 0            | 0         | 0       | 0       |
| Trial bases from      | 10 | 0              | 10             | 70                       | 100          | 70        | 70      | 70      |
| lab                   |    | 1-10           | 60             | 10                       | 0            | 30        | 10      | 0       |
|                       |    | 11-100         | 10             | 10                       | 0            | 0         | 10      | 30      |
|                       |    | >100           | 20             | 10                       | 0            | 0         | 10      | 0       |
| Final cast from lab   | 10 | 0              | 10             | 30                       | 100          | 70        | 90      | 70      |
| i mai cast irom iab   | 10 | 1-10           | 40             | 30                       | 0            | 30        | 10      | 20      |
|                       |    | 11-100         | 20             | 30                       | 0            | 0         | 0       | 10      |
|                       |    | >100           | 30             | 10                       | 0            | 0         | 0       | 0       |
| Twial hazzain 11 1    | 10 | 0              | 0              | 0                        | 00           | FO        | 90      | FO      |
| Trial bases in clinic | 10 | 0              | 0              | 0                        | 80           | 50<br>50  | 80      | 50      |
| before disinfection   |    | 1-10           | 10             | 10                       | 10           | 50        | 20      | 40      |
|                       |    | 11-100<br>>100 | 40<br>50       | 40<br>50                 | 10<br>0      | 0         | 0       | 10<br>0 |
|                       |    | ~10U           | 50             | 50                       | U            | U         | U       | U       |
| Final cast after try  | 10 | 0              | 0              | 30                       | 100          | 80        | 80      | 50      |
| in                    |    | 1-10           | 50             | 40                       | 0            | 20        | 10      | 30      |
|                       |    | 11-100<br>>100 | 20<br>30       | 20<br>10                 | 0            | 0         | 10<br>0 | 20<br>0 |
|                       |    |                |                | 10                       |              |           |         |         |
| Articulator in        | 10 | 0              | 30             | 40                       | 100          | 80        | 80      | 90      |
| clinic after try in   |    | 1-10           | 50             | 30                       | 0            | 20        | 10      | 10      |
|                       |    | 11-100         | 20             | 20                       | 0            | 0         | 10      | 0       |
|                       |    | >100           | 0              | 10                       | 0            | 0         | 0       | 0       |

| Final denture from  | 10 | 0      | 10  | 60  | 100 | 80 | 80 | 70 |
|---------------------|----|--------|-----|-----|-----|----|----|----|
| lab                 |    | 1-10   | 40  | 10  | 0   | 20 | 10 | 30 |
|                     |    | 11-100 | 20  | 20  | 0   | 0  | 10 | 0  |
|                     |    | >100   | 30  | 10  | 0   | 0  | 0  | 0  |
|                     |    |        |     |     |     |    |    |    |
| Remount cast from   | 10 | 0      | 0   | 60  | 100 | 90 | 80 | 90 |
| lab                 |    | 1-10   | 50  | 10  | 0   | 10 | 20 | 10 |
|                     |    | 11-100 | 20  | 10  | 0   | 0  | 0  | 0  |
|                     |    | >100   | 30  | 20  | 0   | 0  | 0  | 0  |
|                     |    |        |     |     |     |    |    |    |
| Final denture       | 10 | 0      | 0   | 0   | 70  | 70 | 70 | 40 |
| before polishing    |    | 1-10   | 0   | 0   | 10  | 30 | 0  | 50 |
| with pumice and     |    | 11-100 | 0   | 0   | 10  | 0  | 0  | 0  |
| before disinfection |    | >100   | 100 | 100 | 10  | 0  | 30 | 10 |
|                     |    |        |     |     |     |    |    |    |
| Remount cast        | 10 | 0      | 10  | 20  | 100 | 90 | 90 | 80 |
| clinic              |    | 1-10   | 50  | 40  | 0   | 10 | 10 | 10 |
|                     |    | 11-100 | 0   | 20  | 0   | 0  | 0  | 10 |
|                     |    | >100   | 40  | 20  | 0   | 0  | 0  | 0  |
|                     |    |        |     |     |     |    |    |    |
| Final denture after | 10 | 0      | 0   | 0   | 100 | 70 | 70 | 20 |
| polishing with      |    | 1-10   | 20  | 20  | 0   | 30 | 20 | 40 |
| pumice before       |    | 11-100 | 10  | 30  | 0   | 0  | 10 | 40 |
| disinfection        |    | >100   | 70  | 50  | 0   | 0  | 0  | 0  |

 $\textbf{Table S2.} \ Level \ of \ microbial \ contamination \ in \ the \ dental \ laboratory.$ 

|   |    | Quantity       |              | 0            | % samples with organisms |           |            |         |  |  |
|---|----|----------------|--------------|--------------|--------------------------|-----------|------------|---------|--|--|
| Site                                    | n  | cfu/swab       | Mix<br>flora | Streptococci | Lactobacilli             | S. aureus | AGNB       | Candida |  |  |
| Plaster room bench                      | 10 | 0              | 10           | 0            | 90                       | 90        | 50         | 100     |  |  |
| for impressions                         |    | 1-10           | 10           | 20           | 0                        | 10        | 30         | 0       |  |  |
| -                                       |    | 11-100         | 50           | 70           | 10                       | 0         | 20         | 0       |  |  |
|   |    | >100           | 30           | 10           | 0                        | 0         | 0          | 0       |  |  |
| Pumice area 1                           | 10 | 0              | 0            | 0            | 50                       | 100       | 0          | 40      |  |  |
|   |    | 1-10           | 0            | 0            | 30                       | 0         | 20         | 40      |  |  |
|   |    | 11-100         | 0            | 40           | 20                       | 0         | 20         | 20      |  |  |
|   |    | >100           | 100          | 60           | 0                        | 0         | 60         | 0       |  |  |
| Pumice brush 1                          | 10 | 0              | 0            | 10           | 100                      | 100       | 60         | 90      |  |  |
|   |    | 1-10           | 10           | 20           | 0                        | 0         | 20         | 10      |  |  |
|   |    | 11-100         | 10           | 50           | 0                        | 0         | 20         | 0       |  |  |
|   |    | >100           | 80           | 20           | 0                        | 0         | 0          | 0       |  |  |
| Pumice area 2                           | 10 | 0              | 0            | 0            | 80                       | 100       | 20         | 70      |  |  |
| 1 1111111111111111111111111111111111111 | 10 | 1-10           | 0            | 20           | 10                       | 0         | 20         | 20      |  |  |
|   |    |                |              | 20           | 10                       |           |            |         |  |  |
|   |    | 11-100<br>>100 | 0<br>100     | 20<br>60     | 0                        | 0<br>0    | 10<br>50   | 10<br>0 |  |  |
|   |    |                |              |              |                          |           |            |         |  |  |
| Pumice brush 2                          | 10 | 0              | 0            | 50           | 100                      | 100       | 80         | 100     |  |  |
|   |    | 1-10           | 30           | 30           | 0                        | 0         | 10         | 0       |  |  |
|   |    | 11-100         | 30           | 10           | 0                        | 0         | 0          | 0       |  |  |
|   |    | >100           | 40           | 10           | 0                        | 0         | 10         | 0       |  |  |
| Grinding wheel                          | 10 | 0              | 50           | 70           | 100                      | 90        | 70         | 100     |  |  |
|   |    | 1-10           | 20           | 30           | 0                        | 10        | 20         | 0       |  |  |
|   |    | 11-100         | 0            | 0            | 0                        | 0         | 10         | 0       |  |  |
|   |    | >100           | 30           | 0            | 0                        | 0         | 0          | 0       |  |  |
| Clinical bench 1                        | 10 | 0              | 0            | 30           | 100                      | 70        | 40         | 80      |  |  |
|   |    | 1-10           | 40           | 20           | 0                        | 20        | 60         | 10      |  |  |
|   |    | 11-100         | 20           | 40           | 0                        | 10        | 0          | 10      |  |  |
|   |    | >100           | 40           | 10           | 0                        | 0         | 0          | 0       |  |  |
| Clinical bench 2                        | 10 | 0              | 0            | 0            | 100                      | 80        | 80         | 80      |  |  |
| Cillical Delicit 2                      | 10 | 1-10           | 20           | 70           | 0                        | 20        | 20         | 10      |  |  |
|   |    | 11-100         | 60           | 20           | 0                        | 0         | 0          | 10      |  |  |
|   |    | >100           | 20           | 10           | 0                        | 0         | 0          | 0       |  |  |
|   | 10 | 0              | 0            | 10           | 100                      | 00        | <b>5</b> 0 |         |  |  |
| Clinical bench 3                        | 10 | 0              | 0            | 10           | 100                      | 80        | 70         | 60      |  |  |
|   |    | 1-10           | 30           | 60           | 0                        | 10        | 20         | 30      |  |  |
|   |    | 11-100         | 40           | 30           | 0                        | 10        | 10         | 10      |  |  |
|   |    | >100           | 30           | 0            | 0                        | 0         | 0          | 0       |  |  |
| Clinical bench 4                        | 10 | 0              | 0            | 30           | 100                      | 80        | 80         | 80      |  |  |
|   |    | 1-10           | 40           | 50           | 0                        | 20        | 20         | 20      |  |  |
|   |    | 11-100<br>>100 | 40           | 20<br>0      | 0                        | 0<br>0    | 0<br>0     | 0       |  |  |
|   |    | >100           | 20           | U            | 0                        | U         | U          | 0       |  |  |
| Clinical bench 5                        | 10 | 0              | 10           | 30           | 100                      | 80        | 60         | 60      |  |  |
|   |    | 1-10           | 20           | 50           | 0                        | 20        | 40         | 40      |  |  |
|   |    | 11-100         | 40           | 10           | 0                        | 0         | 0          | 0       |  |  |
|   |    | >100           | 30           | 10           | 0                        | 0         | 0          | 0       |  |  |