biochemical, immunological and functional characterization. *PhD Thesis-submitted to University of Hyderabad, India*. It has been reported that Mycobacterial protein, the polyketide Pks1 contributes to biofilm formation in *M. tuberculosis* (Pang *et al*, J. Bac. 2012, 194(3):715-21) but inhibitor against this protein is not known. It has also been reported that a chemical, TCA1 reduces the biofilm formation by *M. tuberculosis* (Wang *et al, PNAS,* USA, 2013; 110(27): E2510-7) but its target has not been studied.

[004] The most frequently used diagnostic methods for tuberculosis are the tuberculin skin test, acid-fast stain, and chest radiographs. Treatment of tuberculosis frequently involves multi drug therapy (MDT) treatment. This involves taking a combination of four drugs for a period of 6-9 months, often causing toxicity to the patients. The prolonged treatment is due to the ability of this slow growing bacterium to form the biofilm which makes the bacterium drug tolerant.

[005] The development of drug resistance in this bacterium has led to the development of *M. tuberculosis* variants which show multi-drug resistance (MDR). This is a major issue in the treatment of the disease and there is now a need to identify alternative drugs for the treatment of tuberculosis.

SUMMARY

[006] In example, there is described a medicament comprising a drug selected from a group consisting of acarbose, cyclosporine A, its pharmaceutically acceptable salts thereof, and combinations thereof, for use in treatment of diseases caused by biofilm forming microorganisms, wherein the biofilm forming microorganisms is selected from a group consisting of *Mycobacterium smegmatis*, *Mycobacterium tuberculosis*, multidrug resistant *M. tuberculosis*, extensively drug resistant *M. tuberculosis*, totally drug resistant variant of *M. tuberculosis*, *Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus*

intermedius, Streptococcus mutans, Staphylococcus saprophyticus, Streptococcus constellatus, Pseudomonas aeruginosa, and combinations thereof.

[006a] In another aspect, the present disclosure refers to the use of acarbose or its pharmaceutically acceptable salts in the manufacture of a medicament for use in treatment of diseases caused by biofilm forming microorganisms selected from a group consisting of *Mycobacterium smegmatis*, *Mycobacterium tuberculosis*, multidrug resistant *M. tuberculosis*, extensively drug resistant *M. tuberculosis*, totally drug resistant variant of *M. tuberculosis*, *Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus intermedius, Staphylococcus saprophyticus, Streptococcus constellatus, Pseudomonas aeruginosa,* and combinations thereof.

[006b] In another aspect, the present disclosure refers to the use of acarbose, cyclosporine A, its pharmaceutically acceptable salts thereof, or combinations thereof in the manufacture of a medicament for use in treatment of diseases caused by biofilm forming microorganisms selected from a group consisting of *Mycobacterium smegmatis*, *Mycobacterium tuberculosis*, multidrug resistant *M. tuberculosis*, extensively drug resistant *M. tuberculosis*, totally drug resistant variant of *M. tuberculosis*, *Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus intermedius, Staphylococcus saprophyticus, Streptococcus constellatus, Pseudomonas aeruginosa,* and combinations thereof.

[007] In an example of the present disclosure, there is provided a method of treatment of diseases caused by biofilm forming microorganisms, said method comprising:

(a) obtaining a drug selected from a group consisting of acarbose and its pharmaceutically acceptable salts; and

(b) administering a therapeutically relevant amount of acarbose.

I /We Claim:

1. Use of acarbose or its pharmaceutically acceptable salts in the manufacture of a medicament for the treatment of diseases caused by biofilm forming microorganisms selected from a group consisting of *Mycobacterium smegmatis*, *Mycobacterium tuberculosis*, multidrug resistant *M. tuberculosis*, extensively drug resistant *M. tuberculosis*, totally drug resistant variant of *M. tuberculosis*, *Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus intermedius, Staphylococcus saprophyticus, Streptococcus constellatus, Pseudomonas aeruginosa,* and combinations thereof.

2. Use of acarbose, cyclosporine A, its pharmaceutically acceptable salts thereof, or combinations thereof in the manufacture of a medicament for the treatment of diseases caused by biofilm forming microorganisms selected from a group consisting of *Mycobacterium smegmatis*, *Mycobacterium tuberculosis*, multidrug resistant *M. tuberculosis*, extensively drug resistant *M. tuberculosis*, totally drug resistant variant of *M. tuberculosis*, *Staphylococcus aureus, Staphylococcus epidermidis, Staphylococcus intermedius, Staphylococcus saprophyticus, Streptococcus constellatus, Pseudomonas aeruginosa,* and combinations thereof.

3. The use as claimed in any one of the claims 1-2, wherein the medicament further comprises at least one compound for treatment of the disease caused by the biofilm forming microorganisms.

4. The use as claimed in any one of the claims 1-3, wherein said diseases are selected from a group consisting of tuberculosis, and periodontitis.

5. The use as claimed in claim 3, wherein the at least one compound is selected from a group consisting of isoniazid, rifampicin, pyrazinamide, ethambutol, streptomycin, Fe_3O_4 nanocatalyst, clarithromycine, DNase, and pharmaceutically acceptable salts.

6. The use as claimed in any one of the claims 3-5, wherein the at least one compound is to be administered before, concurrently or after administration of the drug selected from a group consisting of acarbose, and cyclosporine A.

7. The use as claimed in claim 6, wherein administration of the drug selected from a group consisting of acarbose, and cyclosporine A can be in the form of a single dose or multiple doses.