

CLAIMS

1. A system for respiratory system secretion management, comprising:
 an oscillatory wave generator for generating a wave for loosening secretion from a respiratory system of a subject; and

a power module configured to power the system;

characterised in that it comprises:

~~a nasal~~ intranasal module in communication with the oscillatory wave generator, for delivering the wave ~~through~~ into a nasal passage of the subject;

~~a power module configured to power the system;~~

a communication module coupled to at least one of the intranasal module and the oscillatory wave generator, for selectively communicating power and/or one or more waveform characteristics to the respective nasal module and/or oscillatory wave generator; and

an interface module in wireless communication with the communication module, for providing instructions to the communication module, thereby to control the communication module,

wherein the intranasal module being shaped to be positioned in the nasal passage and comprises a housing shaped to seal against the nasal passage, and an acoustic window at a distal end of the housing, through which the wave is delivered into the nasal passage;

wherein the intranasal module is in communication with the oscillatory wave generator via a waveguide; and

an external housing connected to the intranasal module by the waveguide, the oscillatory wave generator being housed in the external housing, the waveguide being flexible to permit flexible placement of the housing during delivery of therapy.

~~and for obtaining feedback on progress of treatment.~~

~~2. A system according to claim 1, wherein the nasal module is an intranasal module.~~

~~3.2.~~ 3.2. A system according to claim 1, wherein the oscillatory wave generator comprises a waveform generator for generating an electrical signal corresponding to the wave, and at least one of:

an amplifier for increasing an amplitude and/or power of the electrical signal; and

a generator for converting the electrical signal into a pressure wave.

~~4.3.~~ 4.3. A system according to claim 1, wherein the oscillatory wave generator is adjustable to control output waveform characteristics.

5. — A system according to claim 1, wherein the oscillatory wave generator is located extra-nasally.

6. — A system according to claim 1, wherein the nasal module is shaped to be positioned in the nasal passage of the subject.

7. — A system according to claim 6, wherein the nasal module comprises the oscillatory wave generator.

8. — A system according to claim 1, wherein the nasal module is in communication with the oscillatory wave generator via a waveguide.

9. — A system according to claim 1, wherein the nasal module comprises a housing shaped to be compatible with the nasal passage of the subject.

10. — A system according to claim 9, wherein the nasal module comprises an acoustic window at a distal end of the housing, through which the wave is delivered into the nasal passage.

11.4. — A system according to claim 1, wherein the intranasal module is adapted to grip the nasal passage.

12.5. — A system according to claim 1, wherein the intranasal module comprises an anchor component for preventing irretrievable slippage of the intranasal module into the nasal passage of the subject.

13.6. — A system according to claim 12.5, wherein the anchor component comprises a hook for catching onto a columella of the subject.

7. — A system according to claim 1, wherein the interface module is configured to instruct the communication module to at least one of:

adjust waveform characteristics of the wave; and

toggle power to the system.

~~14. — A system according to claim 1, wherein the interface module is configured to instruct the communication module to toggle power to the system.~~

~~15. — A system according to claim 1, wherein the interface module is configured to instruct the communication module to adjust waveform characteristics of the wave.~~

~~8. — A system according to claim 1, comprising a patch for attachment to facial skin of the subject, the patch comprising at least one of the oscillatory wave generator, power module and communication module.~~

~~16-9. — The system of any one of claims 1 to 9, wherein the oscillatory wave generator generates a square wave.~~

~~17. — A system for respiratory system secretion management according to any one of claims 1 to 17, being a system for airway secretion management.~~

~~18. — A system for respiratory system secretion management according to claim 18, wherein the nasal module communicates with the oscillatory wave generator, to deliver the wave to lungs of the subject.~~