

WHAT IS CLAIMED IS:

1. A method for thawing a frozen biological material, comprising:
setting a target temperature for the biological material;
applying heat to the biological material via a heating device; and
controllably moving the heated biological material for a time period to
allow generally uniform heat dispersion, wherein the time period is determined based on
at least one of the target temperature and a content volume of the biological material.
2. The method of claim 1, wherein the biological material includes a
suspension of a population of cells.
3. The method of claim 2, wherein the population of cells include eukaryotic
cells.
4. The method of claim 1, wherein the biological material is located within a
vial configured for placement within the heating device.
5. The method of claim 1, further comprising halting movement of the
heating device after the time period has elapsed.
6. The method of claim 1, further comprising recording an identifier
associated with the biological material.
7. The method of claim 1, further comprising recording information
associated with at least one of a temperature of the heating device, a temperature of the
biological material, a speed of movement of the heating device, and the time period.
8. The method of claim 1, further comprising moving the heating device at a
constant speed.

9. The method of claim 1, further comprising moving the heating device at a variable speed.

10. A system for heating a biological material in a vessel, comprising:
a heating device configured to transmit energy to the vessel;
a base moveably coupled to the heating device; and
a processor configured to:
 receive an input associated with a target temperature; and
 transmit a signal to controllably move the heating device relative to the base for a time period, wherein the time period is determined based on at least the target temperature.

11. The system of claim 10, further comprising a memory configured to store data associated with at least one of a temperature of the heat source, a temperature of the vessel, a temperature of the biological material, a speed of movement of the heating device, and the time period.

12. The system of claim 10, wherein the heating device is configured to rotate relative to the base.

13. The system of claim 12, wherein the processor is configured to controllably rotate the heating device relative to the base at a variable speed.

14. The system of claim 10, further comprising a barcode or an ID tag reader configured to identify a barcode associated with the biological material.

15. The system of claim 10, further comprising a network connection configured to transmit data to a network.

16. The system of claim 10, wherein the time period is determined based on at least a content volume of the biological material.

WHAT IS CLAIMED IS:

1. A method for thawing a frozen biological therapeutic, comprising:
reading information contained on a code or tag associated with the frozen biological therapeutic;
setting a target temperature for the frozen biological therapeutic;
applying heat to the frozen biological therapeutic via a heating device,
wherein said reading information contained on a code or tag is performed by a reader operably connected with said heating device; and
controllably moving the biological therapeutic for a time period to allow generally uniform heat dispersion, wherein the time period is determined based on at least one of the target temperature and a content volume of the biological therapeutic, wherein said controllably moving is directed by a processor configured to (a) receive an input associated with said target temperature, wherein said input is received from one or more sources, including said code or tag, and (b) transmit a signal to controllably move the biological therapeutic for said time period,
and wherein said code or tag determines a program of said step of applying heat.
2. The method of claim 1, wherein the frozen biological therapeutic includes a suspension of a population of cells.
3. The method of claim 1 or claim 2, wherein the frozen biological therapeutic is located within a vial, and the heating device is configured for receiving said vial.
4. The method of any one of the preceding claims, further comprising halting movement of the biological therapeutic after the time period has elapsed.
5. The method of any one of the preceding claims, further comprising the step of halting said step of applying heat after the time period has elapsed.
6. The method of any one of the preceding claims, further comprising recording an identifier associated with the frozen biological therapeutic.
7. The method of any one of the preceding claims, further comprising recording information associated with at least one of a temperature of the heating device, a

speed of movement of the heating device, and the time period of said step of applying heat.

8. The method of any one of the preceding claims, further comprising terminating said applying heat after a target temperature is reached.

9. The method of any one of the preceding claims, wherein the heating device is movably coupled with the base such that it rotates relative to the base.

10. The method of any one of the preceding claims, wherein the processor is configured to controllably rotate the heating device relative to the base at a variable speed.