CLAIMS

1. A compression wrap for temperature-controlled application of pressure on an arm of a subject, the compression wrap comprising:

a fluid bladder comprising:

a first element comprising two or more first flaps;

a second element comprising one or more digital flaps;

a third element comprising two or more second flaps, wherein the first element and the third element are connected along a first edge and the second element is connected to the first element and the third element along a second edge

an air cavity; and

a fluid cavity characterized in that the fluid cavity comprises between 3 and 8 attachments per square inch.

2. The compression wrap of claim 1, wherein the first element of the fluid bladder is configured to cover at least a first half of a circumference of the arm of a subject and the third element of the fluid bladder is configured to cover at least a second half of the circumference of the arm of a subject.

3. The compression wrap of claim 1, wherein each of the two or more second flaps corresponds to one of the two or more first flaps.

4. The compression wrap of claim 1, wherein each of the two or more second flaps is removably attached to a corresponding first flap.

5. The compression wrap of claim 1, wherein the two or more first flaps and the two or more second flaps extend perpendicularly from the first edge.

6. The compression wrap of claim 1, wherein the two or more first flaps are separated from each other with slits terminating within the first element.

7. The compression wrap of claim 1, wherein the two or more second flaps are separated from each other with slits terminating within the third element.

8. The compression wrap of claim 1, wherein the air cavity comprises between 0.25 and 2 attachment points per square inch.

9. The compression wrap of claim 1, wherein the air cavity comprises attachment points with a pitch ratio height of between 15 and 50 mm and a pitch ratio width of between 20 to 100 mm.

10. The compression wrap of claim 1, wherein the liquid cavity comprises a liquid inlet and a liquid outlet, the liquid cavity comprising a passageway that runs through the liquid cavity from the liquid inlet to the liquid outlet.

11. The compression wrap of claim 10, wherein the passageway runs along a perimeter of each of the two or more first flaps, the one or more digital flaps, and two or more second flaps.

12. The compression wrap of claim 10, wherein the liquid inlet is positioned on a first flap or second flap distal from the second element.

13. The compression wrap of claim 1, wherein the liquid cavity comprises attachment points with a pitch ratio height of between 5 and 40 mm and a pitch ratio width of between 5 and 40 mm.

14. The compression wrap of claim 1, wherein the liquid cavity comprises three or more liquid pockets.

15. The compression wrap of claim 1, further comprising a fabric layer positioned against the liquid cavity and an insulating layer positioned against the air cavity.