- a fourth bifurcation at which a fourth arteriolar channel is branching off supplying the bone marrow;
- an optional fifth bifurcation at which a fifth arteriolar channel is branching off supplying a skin equivalent;
- an optional sixth bifurcation at which a sixth arteriolar channel is branching off supplying an adipose tissue equivalent;
- an optional seventh bifurcation at which a seventh arteriolar channel is branching off supplying a testes equivalent; and
- an optional eighth bifurcation at which an eighth arteriolar channel is branching off supplying a brain equivalent.

13. Multi- organ-chip device of one of claims 4 to ~~13~~12, wherein the diameter of the arteriolar transport channel in flow direction is constantly reduced such that the sum of cross-sectional areas of all arteriolar transport channels including all bifurcations at a given distance from the lung equivalent remains constant, and wherein in the venular transport channel said reduction in diameter is constantly reverted in flow direction such that the sum of cross-sectional areas of all venular transport channels including all bifurcations at a given distance from the lung equivalent remains constant.

14. Multi- organ-chip device of one of the preceding claims, wherein the base layer comprises or consists of glass, the organ layer comprises or consists of polydimethylsiloxane (PDMS), the organ- holder layer comprises or consists of polycarbonate, the antra layer comprises or consists of PDMS and/or the actuator layer comprises or consists of polycarbonate.

15. Multi- organ-chip device of one of the preceding claims, wherein the organ equivalents each are configured to house a number of organoids which is proportional to the number of organoids present in average in the respective organ of a mammalian organism, preferably of a human, wherein all organ equivalents of the multi- organ-chip device are reduced in size by the same predetermined proportionality factor, e.g. by a factor of 0,00001 (1/100,000).