WHAT IS CLAIMED IS:

1. A transseptal insertion device which is suitable for facilitating precise and safe transseptal puncture of a cardiac interatrial septum, comprising:

a sheath 514 having a distal end that is positioned toward the cardiac interatrial septum of a patient when the transseptal insertion device is in use and a proximal end that is external to the patient, and said sheath 514 includes a lumen 517 extending between said distal end and said proximal end of said sheath 514;

at least one positioning balloon 510 extending radially outwardly from said sheath 514 adjacent said distal end of the sheath 514, wherein said at least one positioning balloon 510 is moveable from an inflated position to a deflated position wherein in said first inflated position the at least one positioning balloon 510, overhangs and extends past the distal end of the sheath 514, preventing accidental puncturing of the cardiac interatrial septum and stabilizing the transseptal insertion device against fossa ovalis of the cardiac interatrial septum, and wherein the sheath 514 includes at least one deflation port 511 positioned adjacent to said at least one positioning balloon 510 to provide fluid communication between said at least one positioning balloon 510 and said at least one lumen 517 of said sheath 514 wherein said at least one deflation port 511 deflates the at least one positioning balloon 510 when said at least one positioning balloon 510 moves from said inflated position to said deflated position;

a puncture member 515 extending longitudinally within the at least one lumen 517 of said sheath 514 wherein said puncture member 515 has a distal end 506 wherein said puncture member 515 is movable from a retracted position wherein said distal end 506 of said puncture member 515 is within said at least one lumen 517 of said sheath 514 to an operative position wherein said distal end 506 of said puncture member 515 extends distally from said distal end of said sheath 514; and

a puncture member balloon 504 extending radially outwardly from said puncture member 515 adjacent said distal end 506 of said puncture member 515 and wherein said puncture member 515 includes a port 507 and a lumen 508, wherein said lumen 508 is in fluid communication with said port 507 to provide fluid communication between said puncture member lumen 508 and said puncture member balloon 504, wherein the puncture member balloon 504 is moveable from a deflated position to an inflated position wherein in said inflated position and when said puncture member 515 is in said retracted position, the puncture member balloon 504 is positioned adjacent said deflation port 511 of the sheath

514 and seals said deflation port 511 of the sheath 514 and said at least one positioning balloon 510 is moveable from said deflated position to said inflated position and wherein when said puncture member 515 is in said operative position, said puncture member balloon 504 is positioned distally from said at least one deflation port 511 of said sheath 514 opening said at least one deflation port 511 of said sheath 514 and said positioning balloon 510 is moveable from said inflated position to said deflated position.

2. The transseptal insertion device of claim 1 wherein the sheath 514 includes at least one inflation port 512 to inflate the at least one positioning balloon 510.

3. The transseptal insertion device of claim 2 wherein said sheath 514 comprises at least one hypotube 516 connected to the at least one inflation port 512 of the sheath 514, wherein the at least one positioning balloon 510 is inflated by fluid supplied through the at least one hypotube 516.

4. The transseptal insertion device of claim 2 wherein the at least one deflation port 511 of the sheath 514 is positioned distal to the at least one inflation port 512 of the sheath 514.

5. The transseptal insertion device of claim 1 wherein said puncture member 515 includes a lumen 518 extending from said distal end 506 to a proximal end and comprises a transseptal wire 519 positioned within said lumen 518 of said puncture member 515, wherein the transseptal wire 519 has a distal end configured to precisely puncture the cardiac interatrial septum.

6. The transseptal insertion device of claim 1 wherein the puncture member 515 includes a radio frequency (RF) tip 505 at the distal end of the puncture member 515, wherein the RF tip 505 is configured to deliver RF energy.

7. The transseptal insertion device of claim 6 wherein the puncture member 515 includes a RF generator 501 that produces RF energy that is transmitted to the RF tip 505.

8. The transseptal insertion device of claim 1 further comprising at least one ultrasound transceiver 26 on a surface of said positioning balloon 510 that emits and receives ultrasound waves, and converts the ultrasound waves to electrical signals.