thrombosing conditions may be 3.0 to 4.5, although data are lacking. Furthermore, another consensus panel also generally recommends an INR of 2.5 to 3.5 for antithrombotic therapy in patients with mechanical heart valves but acknowledges that an INR of 3.0 to 4.5, in conjunction with low-dose aspirin, may offer additional protection without increased risk. As Dr. Friedberg suggests, the INR of the 3.0 to 4.5 range may be excessive for modern prosthetic heart valves, especially those of tissue origin, but we think that this implication needs to be established by prospective randomized studies. Pending such information and resolution of some problems with thromboplastin sensitivity assignments, perhaps one could advocate a recommendation for an "intermediate" INR intensity (2.5 to 3.5) for some indications, in addition to standard intensity (2.0 to 3.0) or high intensity (3.0 to 4.5).

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REFERENCES

The Editor welcomes letters and comments, particularly pertaining to recently published articles in the Mayo Clinic Proceedings. A letter should be no longer than 500 words, contain no more than 5 references, and be in a double-spaced, typewritten format. The letter should be signed. It is assumed that appropriate letters may be published, at the discretion of the Editor, unless the writer indicates otherwise. The Editor reserves the right to edit letters in accordance with the Mayo Clinic Proceedings style and to abridge them if necessary.

Anders Celsius—Temperature Scale
Marc A. Shampo, Ph.D., and Robert A. Kyle, M.D.

Anders Celsius, regarded as the founder of Swedish astronomy, is best remembered as the inventor of the Celsius temperature scale (often called the centigrade scale), in which 0°C is the freezing point of water and 100°C is the boiling point. The centigrade thermometer (described in 1742) is commonly used throughout most of the world, especially in scientific laboratories.

Celsius, the most distinguished member of a well-known scientific family, was born on Nov. 27, 1701, in Uppsala, Sweden (eastern Sweden, 40 miles northwest of Stockholm). He studied astronomy, mathematics, and experimental physics at the University of Uppsala, where his father was professor of astronomy. In 1726, young Anders became secretary of the Uppsala Scientific Society. In 1730, after teaching at the university for several years as professor of mathematics, he succeeded his father as professor of astronomy. He remained in that position until his death in 1744.

From 1732 to 1736, Celsius traveled extensively in other countries; he visited famous astronomers and observatories in Berlin and Nuremburg (Germany), Paris (France), and Italy. While in Paris, he met a famous French mathematician-astronomer, Pierre-Louis Moreau de Maupertuis (1698-1759). In 1736, Celsius joined Maupertuis' expedition to Torne in northern Sweden (now Tornio, Finland). During 1736 and 1737, as an astronomer, Celsius helped with the planned meridian measurements in the polar region, measurements that confirmed the theory of Sir Isaac Newton (1642-1727) that the earth is flattened at its poles.

Celsius was the first person to associate northern lights with the magnetic field of the earth. In 1733, he published a collection of 316 observations of the aurora borealis (northern lights) made by himself and others from 1716 to 1732.

In 1735, Celsius became a fellow of the Royal Society. In 1740, he was the instigator of the building of the Uppsala Observatory, the first modern installation of its kind in Sweden, which was completed in 1742. He died in Uppsala on Apr. 25, 1744, when he was only 42 years old. He was honored on a stamp issued by Sweden in 1982.