Aim of the recommendations of the German Society for Magnesium Research: Recognition and compensation of magnesium deficiency in patients with risk factors for cardiac arrhythmias or manifest rhythm disturbances. Prevention of arrhythmias by administration of magnesium. Therapeutic administration of magnesium in patients with arrhythmias with and without magnesium deficiency. The current state of knowledge claims for considering the status of magnesium and the possibility of a therapeutic intervention with magnesium within the concept of the treatment of cardiovascular diseases. The use of magnesium as single agent or as an adjunct to other therapeutic actions in the prevention and therapy of cardiac arrhythmias can be effective and, in case of oral administration, very safe. In case of parenteral administration, it is important to use adequate doses, monitor cardiovascular and neuromuscular parameters and to consider contraindications.