What is claimed:

1. Use of a non-aqueous pharmaceutical composition comprising dantrolene, or a pharmaceutically acceptable salt thereof, or a mixture thereof, and a pharmaceutically acceptable carrier comprising a C_{1-6}alkyl alcohol, a polyol, a polyether, or a mixture thereof in the manufacture of a medicament, for treating a disorder;
wherein the disorder is malignant hyperthermia, chronic spasticity, exertional heat stroke, cardiac arrhythmias, tachycardis, atrial fibrillation, cardiac arrest, myocardial infarction, heart failure, myocardial injury, cardiomyopathy, central core disease, amyotrophic lateral sclerosis, rhabdomyolysis, Duchenne muscular dystrophy, ataxia, detrusor overactivity, overactive bladder, seizure, epilepsy, neuroleptic malignant syndrome, human stress disorder, Alzheimer's disease, Huntington's disease, multiple sclerosis, Parkinson's disease, ischemia-reperfusion injury, neuronal reperfusion injury, hypoxia, cerebral aneurysm, subarachnoid hemorrhage, stroke, hyperthermia associated with drug abuse, hyperthermia associated with drug overdose, nerve agent exposure, or acetylcholine accumulation; wherein the pharmaceutical composition has an effective pH of 4 to 9; and wherein the pharmaceutical composition is to be administered intramuscularly or subcutaneously.

2. The use of claim 1, wherein the pharmaceutical composition has an effective pH of 5 to 8.

3. The use of any one of the preceding claims wherein the pharmaceutical composition comprises dantrolene.

4. The use of any one of the preceding claims wherein the pharmaceutical composition comprises dantrolene sodium.

5. The use of any one of the preceding claims wherein the pharmaceutical composition comprises dantrolene and dantrolene sodium.

6. The use of any one of the preceding claims, wherein the carrier comprises ethanol, an alkylene glycol, or a liquid polyalkylene glycol, or a mixture thereof.

7. The use of any one of the preceding claims, wherein the carrier comprises ethanol, an alkylene glycol, or a capped liquid polyalkylene glycol, or a mixture thereof.

8. The use of any one of the preceding claims, wherein the carrier comprises ethanol, propylene glycol, or a polyethylene glycol, or a mixture thereof.

9. The use of any one of the preceding claims, wherein the carrier comprises ethanol, propylene glycol, or a capped polyethylene glycol, or a mixture thereof.

10. The use of any one of the preceding claims, wherein the carrier comprises propylene glycol or a polyethylene glycol or a mixture thereof.

11. The use of any one of the preceding claims, wherein the carrier comprises propylene glycol.

12. The use of any one of the preceding claims, wherein the carrier comprises polyethylene glycol.

13. The use of any one of the preceding claims wherein the pharmaceutical composition further comprises an additional pharmaceutically acceptable excipient.