



## Anti-Calcium channel autoantibodies - Overview

### Voltage gated calcium channels (VGCC)

Type / Subunit	Disease associations
<b>Type L</b> ▶ <a href="#">Ca<sub>v</sub>1.1 (dihydropyridin receptor)</a> ▶ <a href="#">Ca<sub>v</sub>1.2</a> ▶ <a href="#">Ca<sub>v</sub>1.3</a>	ALS <sup>1,2,3</sup> , GBS <sup>1</sup> , LEMS <sup>1</sup> , T1DM <sup>4</sup> MG <sup>5</sup> ? IDC <sup>6</sup> , PH <sup>7</sup> , CHB <sup>8</sup> CHB <sup>8,9,10</sup> , SBK <sup>10</sup>
<b>Type P/Q</b> ▶ <a href="#">Ca<sub>v</sub>2.1</a>	LEMS <sup>18</sup> LEMS <sup>18</sup>
<b>Type N</b> ▶ <a href="#">Ca<sub>v</sub>2.2</a>	LEMS <sup>18</sup> , ANP <sup>11</sup> LEMS <sup>18</sup>
<b>Type-T</b> ▶ Ca <sub>v</sub> 3.1 ▶ Ca <sub>v</sub> 3.2 ▶ Ca <sub>v</sub> 3.3	LEMS <sup>18</sup> , CHB <sup>12</sup>
<b>β-subunit</b> ▶ β3, β4	LEMS <sup>13,14</sup>

### Non-voltage gated calcium channels

Type / Subunit	Disease associations
<a href="#">Ryanodine receptor</a>	MG <sup>18</sup>
<a href="#">Inositoltriphosphat receptor</a>	SS, connective tissue diseases <sup>15,16</sup>
TRPC3	MG <sup>17</sup>
Glutamate receptors ▶ <a href="#">AMPA receptors</a> ▶ <a href="#">NMDA receptors</a>	LE, eS, pNP <sup>18</sup> NMDA-E, LE, pNP <sup>18</sup>

ALS	amyotrophic lateral sclerosis	NMDA-E	anti-NMDA encephalitis
aNP	autonomous neuropathy	LEMS	Lambert-Eaton myasthenic syndrome
CHB	congenital heard bloc	PH	primary hypertension
eS	epilepsy syndromes	pNP	paraneoplastic neuropathy
GBS	Guillan-Barré syndrome	SBK	sinus bradycardia
IDC	idiopathic dilatative cardiomyopathy	SS	Sjögren's syndrome
MG	myasthenia gravis	T1DM	diabetes mellitus type 1
LE	limbic encephalitis	TRPC	transient receptor potential channels

### Literature

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