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Promoting neurotrophic effects by GPCR ligands; DISCUSSION; A purinergic dialogue between glia and neurons in the retina; DISCUSSION; Bidirectional astrocyte-neuron communication: the many roles of glutamate and ATP; DISCUSSION; Neuron-glia interactions at the neuromuscular synapse; DISCUSSION; General discussion III; Functional neuronal-glia anatomical remodelling in the hypothalamus; DISCUSSION
Purinergic signalling between axons and microgliaDISCUSSION; ATP receptors of microglia involved in pain; DISCUSSION; Final discussion; Contributor index; Subject index

Sommario/riassunto

ATP, the intracellular energy source, is also an extremely important cell-cell signalling molecule for a wide variety of cells across evolutionarily diverse organisms. The extracellular biochemistry of ATP and its derivatives is complex, and the multiple membrane receptors that it activates are linked to many intracellular signalling systems. Purinergic signalling affects a diverse range of cellular phenomena, including ion channel function, cytoskeletal dynamics, gene expression, secretion, cell proliferation, differentiation and cell death. Recently, this class of signalling molecules and
