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## Poster Presentation

### Is Interleukin-1 Beta Correlated with Intra Cranial Pressure after Traumatic Brain Injury?

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#### Abstract

Traumatic brain injury is a leading cause of disability and death from injury in the world. The Interleukin-1 (IL-1) is a family of cytokines that act as key mediators of the inflammatory response peripherally and centrally. Based on many studies, researchers found that the IL-1 is the well-known molecule in relation to acute TBI in the models of both focal and diffuse injuries. The IL-1 family includes the closely related agonists IL-1 $\alpha$  and IL-1 $\beta$ . Interleukin-1 beta (IL-1 $\beta$ ) is a pro-inflammatory cytokine with a key role in the inflammatory response following TBI and studies indicate that attenuation of this cytokine improves behavioral outcomes. IL-1 $\beta$  is measurable in the serum or CSF of healthy individuals. Although changes in IL-1 $\beta$  expression in CSF and serum following injury appear to be small, attempts have been made to correlate IL-1 $\beta$  levels with outcome. It has been reported that in severe brain injury patients, high concentrations of IL-1 $\beta$  in CSF were associated with poor outcome and increased intra cranial pressure.

**Keywords:** TBI, IL-1 $\beta$ , Intra Cranial Pressure.

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