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## Non-Confidential Technology Disclosure

<b>Title</b>	<b>Use of IMP3 as a Prognostic Marker for Cancer</b>
<b>Inventor</b>	Zhong Jiang, M.D. Director of Urologic Pathology University of Massachusetts Medical School.
<b>Description</b>	IMP3, also known as KOC and L523S, is a member of a family of RNA binding proteins, which includes IMP1 and IMP2. IMP3 is expressed in developing epithelium, muscle, and placenta during early human and mouse embryogenesis, but is expressed at low or undetectable levels in adult tissues. However, IMP3 is re-expressed in malignant tumors and soft tissue carcinomas but not in benign tissues. Dr. Jiang's invention is based on the strong correlation between expression of IMP3 and metastasis-free survival and prognosis of renal cell carcinoma (RCC) and other urologic cancers.
<b>Application</b>	Levels of IMP3 can be detected using IHC-based technology as a diagnostic and prognostic tool, aiding clinicians in therapeutic stratification of patients. Furthermore, protein expression levels can be used to monitor patients post-treatment. The strong correlation between IMP3 expression and metastasis suggests that it may also be an important potential therapeutic target.
<b>Advantage</b>	As a biomarker, IMP3 can accurately distinguish localized tumors with a high probability of becoming metastatic from those that will remain indolent. Because IMP3 is not normally expressed in adult tissues, it can be applied as a biomarker for any epithelial cancer and recent evidence supports that it is not limited to RCC. IMP3 can be detected with standard laboratory techniques, or a kit created to screen for expression levels.
<b>Publications:</b>	Lancet Oncology, 2006: 7:556-564. Modern Pathology, 2007: 20: 242-247. Modern Pathology, 2007: epub ahead of print September 21, 2007.
<b>Patent Status</b>	U.S. Patent Filed
<b>Licensing Status</b>	Available to License
<b>Docket</b>	UMMC 06-40
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