

Extrapancreatic Neoplasms in Patients with IPMN: Is There an Increased Risk?

**Luigi Pugliese¹, Marco Del Chiaro², Jan D'Haese³, Giovanni Marchegiani⁵,
Patrick Wentzel⁴, Guralp O Ceyhan³, Muharrem Keskin⁶**

¹Second Unit of General Surgery, Department of Surgery, IRCCS "Policlinico San Matteo". Pavia, Italy.

²Division of Surgery, CLINTEC, "Karolinska Institutet", Karolinska University Hospital. Stockholm, Sweden.

Departments of ³Surgery, and ⁴Gastroenterology,

"Klinikum rechts der Isar", "Technische Universität München". Munich, Germany.

⁵Pancreas Institute, Department of Surgery, Verona University Hospital. Verona, Italy.

⁶Division of Gastroenterology, Department of Internal Medicine, Ege University. İzmir, Turkey

Context The increasing detection of intraductal papillary mucinous neoplasm of the pancreas (IPMN) in general population over the last decade has led to observe a probable association with synchronous or metachronous extrapancreatic neoplasm (EPN) in these patients despite no unequivocal proof was found so far. **Objectives** A systematic review of the available literature has been performed to clarify the level of evidence and knowledge on this issue. **Methods** We performed a PubMed search with the following search terms: "extrapancreatic", "non pancreatic", "additional pancreatic", "additional primary" and alternatively matched with "neoplasms/tumors/cancers/malignancies/lesions". Then we selected only those articles specific for IPMN among the obtained results and proceeded to the analyses of data. The review was conducted in a systematic manner

according to the PRISMA statement rules. **Results** selection process led to identify and include a total of fifteen articles. An increased risk for extrapancreatic malignancies, mostly gastric and colon cancer, was described in the majority of the selected studies which were however all retrospective and only one of them multicentre. Unexpectedly, the association between IPMN and EPN was not reported by the largest and only prospective study available. **Conclusion** Current literature does not allow any definitive conclusion on this subject. The general opinion in favor of a higher prevalence of EPN in IPMN patients remains therefore controversial. No specific screening protocols in addition to standard surveillance and diagnostic examinations for common neoplasms should be recommended in these patients until further evidence will be provided.