

Supplementary Information

The **ICGC/TCGA Pan-Cancer Analysis of Whole Genomes Consortium**

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Timing-clustered mutational processes during tumour evolution Jonas Demeulemeester^{91,92}, Maxime Tarabichi^{1,91}, Matthew W. Fittall⁹¹, Jan O. Korbel^{7,8}, Peter J. Campbell^{1,2} & Peter Van Looy^{91,92}

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Clustering of Tumour Genomes Based on Telomere Maintenance-Related Features David Haan⁹, Lincoln D. Stein^{12,13} & Joshua M. Stuart⁹

Clustered Mutational Processes in PCAWG Jonas Demeulemeester^{91,92}, Maxime Tarabichi^{1,91}, Matthew W Fittall⁹¹, Peter J. Campbell¹², Jan O. Korbel⁷⁸ & Peter Van Looy^{91,92}

Tumours Without Detected Driver Mutations Esther Rheinbay^{3,6,19}, Amaro Taylor-Weiner⁹⁰, Radhakrishnan Sabarinathan^{87,88,89}, Peter J. Campbell¹² & Gad Getz^{3,4,5,6}

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Pilot-63 Benchmarking and Validation Exercise, Production Calling and Variant Consensus Development, and Performance on Previously Validated Samples L. Jonathan Dursi^{12,25}, Christina K. Yung¹⁵, Matthew H. Bailey^{26,27}, Gordon Saksena³, Keiran M. Raine¹,

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Tumour-specific providers (gastric cancer) in Japan Yasuhito Arai²²⁶, Masashi Fukayama⁵⁸⁵, Natsuko Hama²²⁶, Fumie Hosoda²²⁶, Shumpei Ishikawa⁵⁸⁶, Hitoshi Katai⁵⁸⁷, Mamoru Kato³⁵⁸, Hiroto Katoh⁵⁸⁶, Daisuke Komura⁵⁸⁶, Genta Nagae^{310,318}, Hiromi Nakamura²²⁶, Hirofumi Rokutan³⁵⁸, Mihoko Saito-Adachi³⁵⁸, Akihiro Suzuki^{310,588}, Hirokazu Taniguchi⁵⁸⁹, Kenji Tatsuno³¹⁰, Yasushi Totoki²²⁶, Tetsuo Ushiku⁵⁸⁵, Shinichi Yachida^{226,590}, Shogo Yamamoto³¹⁰, Hiroyuki Aburatani³¹⁰ & Tatsuhiro Shibata^{226,227}

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Tumour-specific providers (biliary tract cancer) in Singapore Su Pin Choo⁵⁹⁶, Ioana Cutcutache^{195,346}, Narong Khuntikeo^{414,597}, John R. McPherson^{195,346}, Choon Kiat Ong⁵⁹⁸, Chawalit Pairrojku⁴¹⁰, Irinel Popescu⁵⁹⁹, Steven G. Rozen^{195,196,346}, Patrick Tan^{189,194,195,196} & Bin Tean Teh^{194,195,196,197,198}

Tumour-specific providers (blood cancer) in South Korea Keun Soo Ahn⁶⁰⁰, Hyung-Lae Kim⁵⁶, Youngil Koh^{336,337} & Sung-Soo Yoon³³⁷

Tumour-specific providers (chronic lymphocytic leukaemia) in Spain Marta Aymerich⁶⁰¹, Josep L. Gelpi^{40,144}, Ivo G. Gut^{49,74}, Marta Gut^{49,74}, Armando Lopez-Guillermo⁶⁰², Carlos López-Otin⁶⁰³, Xose S. Puente⁶⁰³, Romina Royo⁴⁰, David Torrents^{40,76} & Elias Campo^{604,605}

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Tumour-specific providers (oesophageal cancer) in the United Kingdom Yeng Ang⁶¹⁹, Hugh Barf⁶²⁰, Duncan Beardsmore⁶²¹, Matthew Eldridge³²⁸, James Gossage⁶²², Nicola Grehan³⁶¹, George B. Hanna⁶²³, Stephen J. Hayes^{624,625}, Ted R. Hupp⁶²⁶, David Khoo⁶²⁷,

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