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Reporting Summary

X Life sciences

Nature Research wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Research policies, see <u>Authors & Referees</u> and the <u>Editorial Policy Checklist</u>.

Statistics						
For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.						
n/a Confirmed	n/a Confirmed					
☐ ☐ The exact san	nple size (n) for each experimental group/condition, given as a discrete number and unit of measurement					
A statement	on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly					
The statistica Only common t	The statistical test(s) used AND whether they are one- or two-sided Only common tests should be described solely by name; describe more complex techniques in the Methods section.					
A description	A description of all covariates tested					
A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons						
A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)						
For null hypothesis testing, the test statistic (e.g. <i>F</i> , <i>t</i> , <i>r</i>) with confidence intervals, effect sizes, degrees of freedom and <i>P</i> value noted Give <i>P</i> values as exact values whenever suitable.						
For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings						
For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes						
Estimates of effect sizes (e.g. Cohen's d , Pearson's r), indicating how they were calculated						
1	Our web collection on <u>statistics for biologists</u> contains articles on many of the points above.					
Software and o	code					
Policy information about availability of computer code						
Data collection	Provide a description of all commercial, open source and custom code used to collect the data in this study, specifying the version used OR state that no software was used.					
Data analysis	Provide a description of all commercial, open source and custom code used to analyse the data in this study, specifying the version used OR state that no software was used.					
For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors/reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research guidelines for submitting code & software for further information.						
Data						
Policy information about <u>availability of data</u> All manuscripts must include a <u>data availability statement</u> . This statement should provide the following information, where applicable: - Accession codes, unique identifiers, or web links for publicly available datasets - A list of figures that have associated raw data - A description of any restrictions on data availability						
Summary-level data is available by application to Foundation Medicine.						
Field-specific reporting						

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

Ecological, evolutionary & environmental sciences

Behavioural & social sciences

Life sciences study design

All studies must disclose on these points even when the disclosure is negative.				
Sample size	The entire cohort of 13,336 colorectal cancer samples sequenced by Foundation Medicine was used. No samples were excluded.			
Data exclusions	No data were excluded.			
Replication	Figure 1 shows a demographic comparison of this data set to publicly available data sets. No similarly sized data set is available to which we might be able to compare the more discreet findings.			
Randomization	There is no opportunity to randomize for this study, as it is a retrospective study.			
Blinding	There is no blinding that is able to be done for this study.			

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems			Methods	
n/a	Involved in the study	n/a	Involved in the study	
\boxtimes	Antibodies	\boxtimes	ChIP-seq	
\boxtimes	Eukaryotic cell lines	\boxtimes	Flow cytometry	
\boxtimes	Palaeontology	\boxtimes	MRI-based neuroimaging	
\boxtimes	Animals and other organisms			
\boxtimes	Human research participants			
\boxtimes	Clinical data			