The importance of intratumour genetic and functional heterogeneity is increasingly recognised as a driver of cancer progression and survival outcome. Understanding how tumour clonal heterogeneity impacts upon therapeutic outcome, however, is still an area of unmet clinical and scientific need. TRACERx (TRAcking non-small cell lung Cancer Evolution through therapy [Rx]), a prospective study of patients with primary non-small cell lung cancer (NSCLC), aims to define the evolutionary trajectories of lung cancer in both space and time through multiregion and longitudinal tumour sampling and genetic analysis. By following cancers from diagnosis to relapse, tracking the evolutionary trajectories of tumours in relation to therapeutic interventions, and determining the impact of clonal heterogeneity on clinical outcomes, TRACERx may help to identify novel therapeutic targets for NSCLC and may also serve as a model applicable to other cancer types.
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Chordata Animalia (Animals, Chordates, Humans, Mammals, Primates, Vertebrates) - Hominidae [86215] human common
, genes, 03502, Genetics - General, 03508, Genetics - Human, 10062, Biochemistry studies - Nucleic acids, purines and
pyrimidines, 16006, Respiratory system - Pathology, 24004, Neoplasms - Pathology, clinical aspects and systemic effects
, Biochemistry and Molecular Biophysics, Human Medicine, Medical Sciences, genetic analysis laboratory techniques,
genetic techniques, Molecular Genetics, Oncology, Pulmonary Medicine, BIOCHEMISTRY, BIOLOGY, CHROMOSOMAL
INSTABILITY, INTRATUMOR HETEROGENEITY, PROGNOSTIC-SIGNIFICANCE, MUTATIONAL EVOLUTION,
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