Genetron Health Releases 22 New Research Results at American Association for Cancer Research Annual Meeting (AACR) 2021

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BEIJING--(BUSINESS WIRE)--Apr. 13, 2021-- Genetron Holdings Limited (“Genetron Health” or the “Company”, NASDAQ:GTH), a leading precision oncology platform company in China that specializes in molecular profiling tests, early cancer screening products and companion diagnostics development, today announced the release of 22 research results at the American Association for Cancer Research Annual Meeting 2021 (AACR 2021).

The results were from a series of studies that Genetron Health conducted with 13 leading hospitals in China. The Company leveraged original research and innovative technologies such as integrated DNA and RNA sequencing in gene fusion detection, a new MSI (microsatellite instability) detection algorithm model, its "One-Step Seq” method, and core products such as Onco Panscan ™ and comprehensive sarcoma gene detection tests.

These studies analyzed the spread of various types of cancers throughout the Chinese population, covering lung cancer, intestinal cancer, pancreatic cancer, nervous system tumors, thymic carcinoma, and other types of cancers. More specifically, the studies focused on these cancers’ inheritance, mutation, and fusion characteristics. They paid particular attention to the validity of immunotherapy markers for various types of cancers, as well as rare cancer cases and new therapeutic treatments. These studies provided important insights that can enable the accurate diagnosis and treatment of cancer, facilitating the design of effective products in the future.

Dr. Yunfu Hu, Genetron Health’s Chief Medical Officer, said, " Genetron Health is committed to building a strong bridge between scientific research and clinical applications. The studies’ results show that the Company’s innovative technologies and products can help to further analyze the characteristics of cancer genomics for different types of cancer, optimize conventional technologies, and provide ideas for new product design, so as to promote the healthy development of translational medicine. For example, for soft tissue sarcoma (STS), the use of integrated DNA and RNA sequencing in gene fusion detection can greatly improve the detection rate of STS gene fusion, which may benefit more STS patients.

“For hereditary cancers, the screening method used to detect Li-Fraumeni syndrome will also improve cancer detection rates in these patients and provide more intervention opportunities for them; for colorectal cancer, our analysis of KMT2C/2D inactivation mutations is also pointing to more possibilities for immunotherapy patients. And lastly, our work on rare cancer cases and the experimentation of new treatments is furthering the development of diagnosis and treatment research for these various types of patients," Hu added.

Exploring Ways to Optimize Conventional Technologies

To overcome the DNA-sequencing limitations involved with detecting gene fusion, Genetron Health optimized the use of conventional technologies in Study #2288. During this study, more accurate, efficient, and low-cost detection of gene fusion mutations was achieved at the RNA sequencing level. This was evaluated and verified in a STS cohort of 142 Chinese patients. Compared with DNA detection alone, integrated DNA and RNA sequencing improved the detection rate of STS fusion by 177%, which could provide clinical benefits for more STS patients.

Study #2080 optimized the algorithm that detects MSI through next generation sequencing (NGS). The study was conducted on a large cohort of 2,523 samples with various types of cancers. According to the study results, the optimized algorithm was 99.9% consistent with PCR (polymerase chain reaction) testing – the industry’s current gold standard. The positive predictive value of MSI-H was 98.73%, and the negative predictive value of MSS was 99.92%.

Focusing on Hereditary Cancers

Two studies (#1464, #2557) provided screening methods for Li-Fraumeni syndrome, an inherited condition that is characterized by an increased risk for certain types of cancer. These methods utilized in-depth analysis of germline mutations and investigated the distribution of genetic characteristics for pancreatic cancer in the Chinese population, providing evidence and additional ideas for the diagnosis and treatment of hereditary cancers.

Investigating Gene Mutation and Fusion Characteristics

Nine studies (#2217, #2163, #2223, #2216, #2215, #2313, #2252, #2183, #2182) examined the mutation and fusion characteristics of soft tissue sarcoma, melanoma, neuroendocrine tumors, non-small cell lung cancer, thymic carcinoma, small bowel adenocarcinoma, ampullary carcinoma, etc. The studies focused on finding potential targets for precise therapeutic treatment, drug-resistant targets and effective countermeasures.

Probing Immunotherapy Markers

Four studies (#1639, #1640, #1641, #1681) investigated the predictive effects of KMT2C/D loss-of-function mutations, DDR signaling pathway-related gene mutations, ARID1A mutations, and BRCA1/2 mutations on immunotherapy treatments for a wide range of cancer types, providing further insights.

Spotlight on Rare Cancer Cases and New Treatment Therapies

Five studies (#0803, #0422, #1209, #1199, #0625) detected special molecular abnormalities in patients with Lynch syndrome-related lung cancer, metastatic melanoma, anaplastic thyroid carcinoma, papillary thyroid carcinoma and liposarcoma, respectively. In these studies, scientists used molecular detection to diagnose and classify such cancers, and new, targeted therapy and immunotherapy schemes were adopted for these patients,

benefiting them in the long run.

Abstract#	Title
1464	Enrichment and screening of LFS patients by analyzing TP53 germline mutations of a Chinese cancer cohort
2252	Genome profiling of thymic carcinoma identifies putative driver mutations in the NF-κB signaling pathway
2557	Germline mutation landscape in a large cohort of Chinese pancreatic cancer patients
0803	Molecular diagnosis and immunotherapy of a rare lung carcinoma patient associated with PMS2 c.1144+1G>A mutation-driven Lynch syndrome
0422	Sequential targeted therapy and immunotherapy of a BRAF positive metastatic melanoma patient with BRAF inhibitor vemurafenib, MEK inhibitor cobimetnib and a novel PD-1 antibody Sintilimab
2183	Genomic profiling of small bowel adenocarcinoma reveals targetable mutations in multiple signaling pathways
2217	More somatic mutations can be detected in cerebrospinal fluid ctDNA of NSCLC patients with brain metastases
2182	Evaluation of somatic and germline mutations in ampullary carcinoma reveals actionable targets in multiple signaling pathways
1209	An effective treatment for recurrent and inoperable anaplastic thyroid carcinoma using sintilimab and anlotinib: a case report
1681	Correlation of BRCA1/2 mutations with response to immune checkpoint inhibitors in colorectal cancer
1641	The predictive values of ARID1A mutations for response to immune checkpoint inhibitors are varied in different types of solid tumors
1639	Correlation of KMT2C/D loss-of-function mutations with PD-L1 expression and response to immune checkpoint inhibitors in solid tumors
1640	Correlations of DNA damage response gene alterations with response to immune checkpoint inhibitors are different in solid tumors
2288	Identification of gene fusions in soft tissue sarcoma improved by integrative DNA and RNA sequencing
2163	Molecular characteristics of CDK4 and/or MDM2 amplification in Chinese soft tissue sarcoma (STS) patients
0625	Co-amplification of CDK4 and MDM2 plus HMGA2 fusion in a patient with myogenic differentiation dedifferentiated liposarcoma
2223	Distinct genomic features of cutaneous, acral and mucosal melanomas in a Chinese retrospective cohort
2216	Exploration of the genomic features of pan-neuroendocrine tumors in a Chinese retrospective analysis
2215	Landscape of RET fusion identified by next-generation sequencing in a Chinese multi-cancer retrospective analysis
1199	Mosaic KRAS G12S mutation associates with poor outcome in papillary thyroid carcinoma: A case report
2080	Tumor microsatellite instability detection method using paired tumor-normal sequence data
2313	The characteristics of ERBB2 exon 20 insertion in a large cohort of Chinese NSCLC patients

About Genetron Holdings Limited

Genetron Holdings Limited (“Genetron Health” or the “Company”) (Nasdaq:GTH) is a leading precision oncology platform company in China that specializes in cancer molecular profiling and harnesses advanced technologies in molecular biology and data science to transform cancer treatment. The Company has developed a comprehensive oncology portfolio that covers the entire spectrum of cancer management, addressing needs and challenges from early screening, diagnosis and treatment recommendations, as well as continuous disease monitoring and care. Genetron Health also partners with global biopharmaceutical companies and offers customized services and products. For more information, please visit ir.genetronhealth.com.

Safe Harbor Statement

This press release contains forward-looking statements. These statements are made under the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. Statements that are not historical facts, including statements about the Company’s beliefs and expectations and prospectus of and plans for commercializing HCCscreen ™ in China, are forward-looking statements. Forward-looking statements involve inherent risks and uncertainties, and a number of factors could cause actual results to differ materially from those contained in any forward-looking statement. In some cases, forward-looking statements can be identified by words or phrases such as “may”, “will,” “expect,” “anticipate,” “target,” “aim,” “estimate,” “intend,” “plan,” “believe,” “potential,” “continue,” “is/are likely to” or other similar expressions. Further information regarding these and other risks, uncertainties or factors is included in the Company’s filings with the SEC. All information provided in this press release is as of the date of this press release, and the Company does not undertake any duty to update such information, except as required under applicable law.

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Media Relations Contact
Yanrong Zhao
Genetron Health
yanrong.zhao@genetronhealth.com

Investor Relations Contact
US:
Hoki Luk
Head of Investor Relations
Email: hoki.luk@genetronhealth.com
Phone: +1 (408) 891-9255

David Deuchler, CFA
Managing Director | Gilmartin Group
Email: David@gilmartinir.com

Phone: (917) 209-5605

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