

SUPPLEMENTARY INFORMATION

Circulating Tumor DNA in a Breast Cancer Patient's Plasma Represents Driver Alterations in the Tumor Tissue

**Jieun Lee^{1,2§}, Sung-Min Cho^{3§}, Min Sung Kim⁴, Sug Hyung Lee^{4,5},
Yeun-Jun Chung^{3,6,7}, Seung-Hyun Jung^{5*}**

¹Division of Medical Oncology, Department of Internal Medicine, Seoul St. Mary's Hospital, Seoul 06591, Korea, ²Cancer Research Institute, College of Medicine, The Catholic University of Korea, Seoul 06591, Korea, ³Integrated Research Center for Genome Polymorphism, College of Medicine, The Catholic University of Korea, Seoul 06591, Korea, ⁴Department of Pathology, College of Medicine, The Catholic University of Korea, Seoul 06591, Korea, ⁵Cancer Evolution Research Center, College of Medicine, The Catholic University of Korea, Seoul 06591, Korea, ⁶Department of Microbiology, College of Medicine, The Catholic University of Korea, Seoul 06591, Korea, ⁷Precision Medicine Research Center, College of Medicine, The Catholic University of Korea, Seoul 06591, Korea

Supplementary Table 3. Seventy-eight cancer genes for OncoChase cancer panel analysis

<i>MTOR</i>	<i>CTNNB1</i>	<i>SMO</i>	<i>ATM</i>	<i>ERBB2</i>
<i>ARID1A</i>	<i>RHOA</i>	<i>BRAF</i>	<i>SDHD</i>	<i>BRCA1</i>
<i>MPL</i>	<i>PIK3CA</i>	<i>EZH2</i>	<i>KRAS</i>	<i>SPOP</i>
<i>JAK1</i>	<i>FGFR3</i>	<i>FGFR1</i>	<i>ERBB3</i>	<i>SMAD4</i>
<i>NRAS</i>	<i>PDGFRA</i>	<i>MYC</i>	<i>CDK4</i>	<i>STK11</i>
<i>MCL1</i>	<i>KIT</i>	<i>JAK2</i>	<i>MDM2</i>	<i>GNA11</i>
<i>DDR2</i>	<i>KDR</i>	<i>CDKN2A</i>	<i>PTPN11</i>	<i>JAK3</i>
<i>DNMT3A</i>	<i>FBXW7</i>	<i>GNAQ</i>	<i>FLT3</i>	<i>CCNE1</i>
<i>ALK</i>	<i>TP53</i>	<i>ABL1</i>	<i>BRCA2</i>	<i>SRC</i>
<i>XPO1</i>	<i>APC</i>	<i>NOTCH1</i>	<i>RB1</i>	<i>AURKA</i>
<i>NFE2L2</i>	<i>NPM1</i>	<i>RET</i>	<i>NKX2-1</i>	<i>GNAS</i>
<i>IDH1</i>	<i>ESR1</i>	<i>PTEN</i>	<i>AKT1</i>	<i>U2AF1</i>
<i>ERBB4</i>	<i>RAC1</i>	<i>PLEKHS1</i>	<i>MAP2K1</i>	<i>MAPK1</i>
<i>VHL</i>	<i>EGFR</i>	<i>FGFR2</i>	<i>IDH2</i>	<i>MED12</i>
<i>RAF1</i>	<i>CDK6</i>	<i>HRAS</i>	<i>CDH1</i>	<i>MLH1</i>
<i>MET</i>	<i>CCND1</i>	<i>TERT</i>		