

Table S1 Definitions of class 1, 2 and 3

Class 1	Class 2	Class 3	Variation type
<i>EGFR</i>	<i>EGFR</i>	<i>EGFR</i>	L858R, 19del, 20ins, L861Q, S768I, G719X
<i>ALK</i>	<i>ALK</i>	<i>ALK</i>	Fusion
<i>ROS1</i>	<i>ROS1</i>	<i>ROS1</i>	Fusion
<i>RET</i>	<i>RET</i>	<i>RET</i>	Fusion
<i>MET</i>	<i>MET</i>	<i>MET</i>	Exon14 skip, amp
<i>NTRK</i>	<i>NTRK</i>	<i>NTRK</i>	Fusion
<i>BRAF</i>	<i>BRAF</i>	<i>BRAF</i>	V600X
<i>ERBB2</i>	<i>ERBB2</i>	<i>ERBB2</i>	20ins, amp
	<i>KRAS</i>	<i>KRAS</i>	G12X, G13X, Q61X
	<i>STK11</i>	<i>STK11</i>	Mutation
	<i>TP53</i>	<i>TP53</i>	Mutation in exon 4–8 or multiple mutations
		<i>TMB</i>	>10 mutations/Mb as TMB high, ≤10 mutations/Mb as TMB low

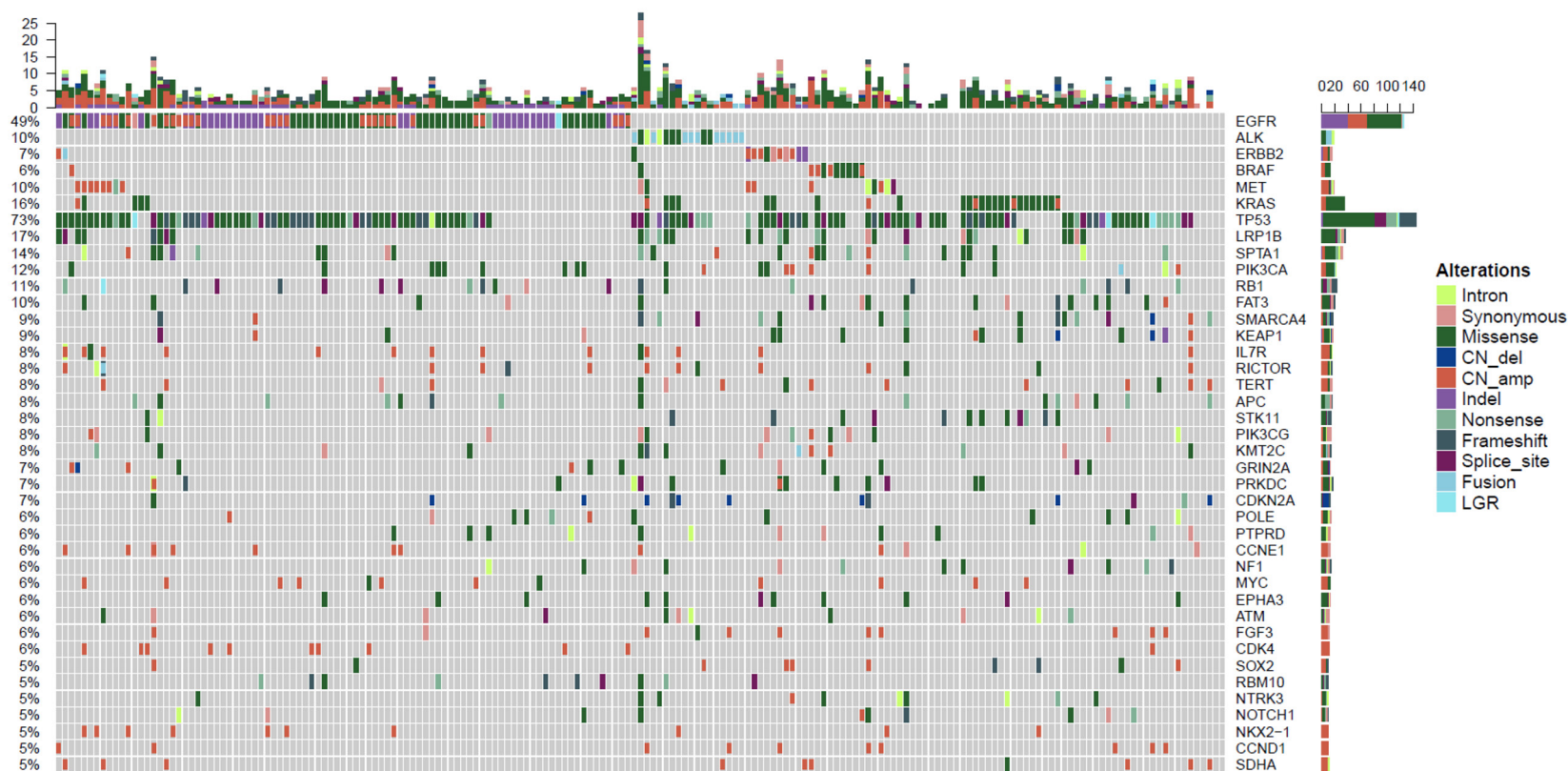


Figure S1 Genomic mutations detected from tumor tissue samples. Each column represents one patient. The total number of mutations detected in each patient were graphed on top of the Oncoprint. The genes are listed on the right. The mutation detection rate of each gene is on the left. Different colors indicate different types of alterations.

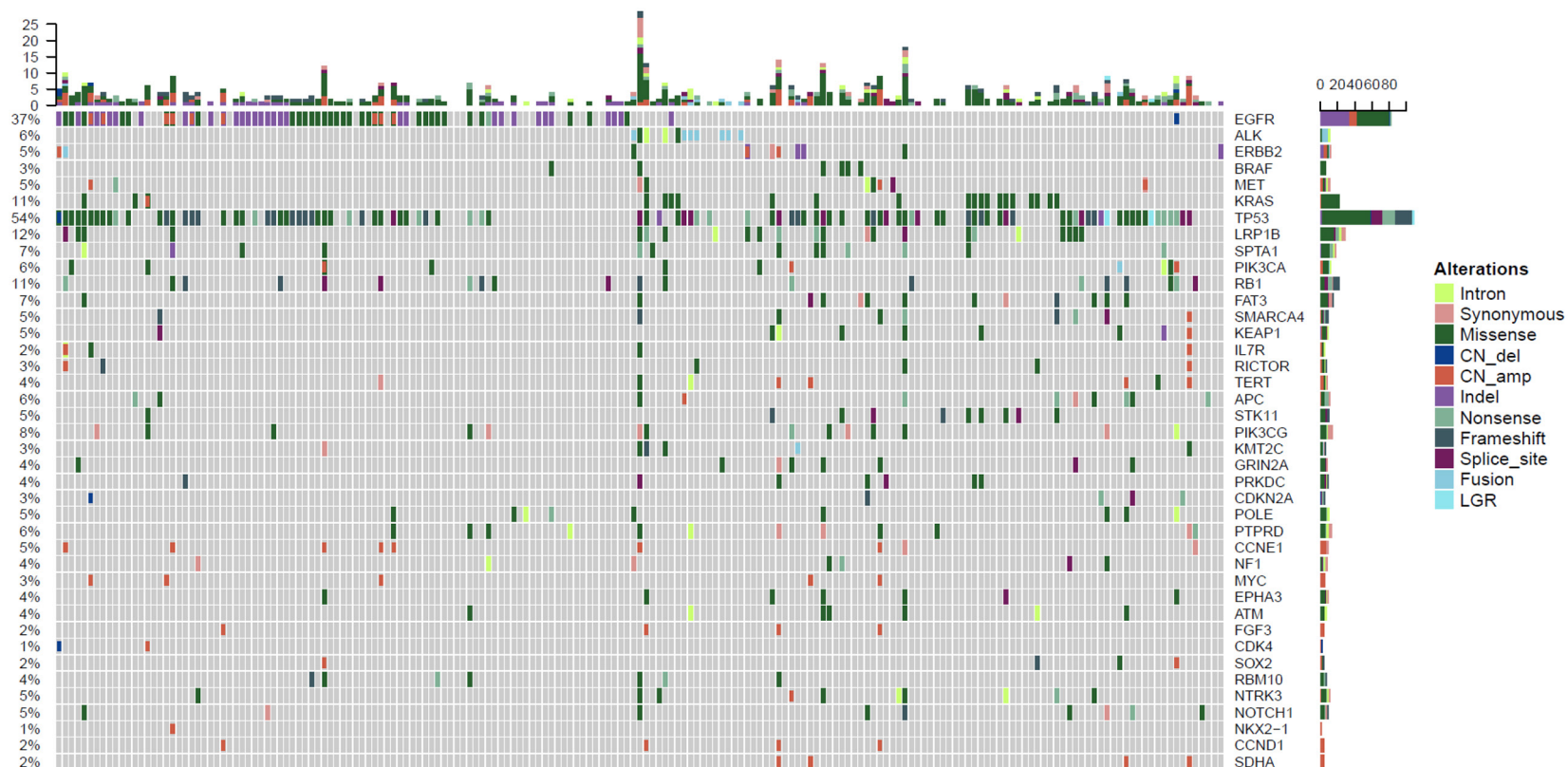


Figure S2 Genomic mutations detected from paired plasma samples. Each column represents one patient. The total number of mutations detected in each patient were graphed on top of the Oncoprint. The genes are listed on the right. The mutation detection rate of each gene is on the left. Different colors indicate different types of alterations.

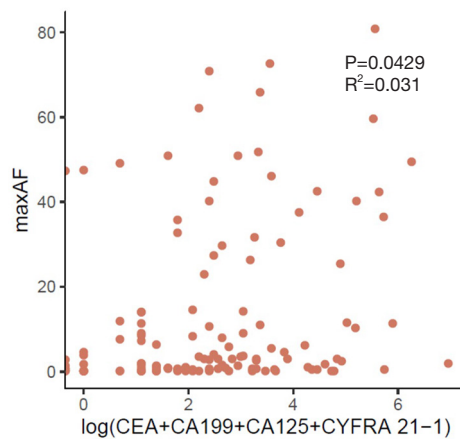


Figure S3 The correlation between plasma maximum allele fraction (maxAF) and the concentration of serum tumor markers.