

Extended Data Table 11(a)|Six sets of solutions’ calculated result in Constraint condition 1(Step 5)

x_j^p		$j=12$	$j=27$	$j=45$	$j=105$	$j=107$	$j=111$
$\mu_{j_z}^{REAL}$	z_{2_1}	-0.8859	-0.0827	0.9460	-1.7253	1.2142	-1.9358
	z_{1_2}	0.4848	0.7536	0.5974	0.8135	0.6028	0.7505
	z_{1_3}	-0.8654	-0.5631	-0.4238	-0.6091	-0.5457	-0.6329
Constraint condition 1 (Type4)	$\mathcal{G}_{1_RDS} = \int_0^{1.5} \mathcal{G}_{1_PDF} \left(\phi_1 \left(z_1, \mathbf{0}, \boldsymbol{\sigma}_{z_1} \right) \right) ds$						
Calculate Result	$\mathcal{G}_{1_RDS}$	0.1949	0.1800	0.1639	0.1947	0.1504	0.1921

Here, we select six sets of Non-inferior solutions for interpretation from the 127 non-inferior solutions in **Extended Data Table 1**. These six sets of solutions are identified by the numbers of $j=12, j=27, j=45, j=105, j=107$, and $j=111$ (Methods, Eq.(27)-(30)).

Extended Data Table 11(b)|Six sets of solutions' calculated result in Constraint condition 2(Step 5)

$\mathbf{x}_j^P$		$j=12$	$j=27$	$j=45$	$j=105$	$j=107$	$j=111$
$\mu_{j_z}^{\text{REAL}}$	z_{2_1}	-0.8859	-0.0827	0.9460	-1.7253	1.2142	-1.9358
	z_{1_2}	0.4848	0.7536	0.5974	0.8135	0.6028	0.7505
	z_{1_3}	-0.8654	-0.5631	-0.4238	-0.6091	-0.5457	-0.6329
Constraint condition 2 (Type4)		$g_{2_RDS} = \int_0^5 g_{2_PDF} \left(\phi_2 \left(\mathbf{z}_2, \mathbf{0}, \boldsymbol{\sigma}_{\mathbf{z}_2} \right) \right) ds$					
Calculate Result	g_{2_RDS}	0.2268	0.2402	0.2152	0.1893	0.1969	0.1732

Here, we select six sets of Non-inferior solutions for interpretation from the 127 non-inferior solutions in **Extended Data Table 1**. These six sets of solutions are identified by the numbers of $j=12, j=27, j=45, j=105, j=107$, and $j=111$ (Methods, Eq.(27)-(30)).

Extended Data Table 11(c)| Six sets of solutions' calculated result in Constraint condition 3(Step 5)

x_j^p		$j=12$	$j=27$	$j=45$	$j=105$	$j=107$	$j=111$
$\mu_{j_z}^{REAL}$	z_{3_1}	-1.0244	-0.2765	0.7691	-1.8946	1.0213	-2.0884
	z_{3_3}	-0.6246	-0.2256	-0.1382	-0.2768	-0.2430	-0.3274
Constraint condition 3 (Type4) $g_{3_RDS} = \int_0^5 g_{3_PDF} \left(\phi_3(z_3, \mathbf{0}, \sigma_{z_3}) \right) ds$							
Calculate Result	g_{3_RDS}	0.4644	0.5628	0.6610	0.3562	0.6641	0.3358

Here, we select six sets of Non-inferior solutions for interpretation from the 127 non-inferior solutions in **Extended Data Table 1**. These six sets of solutions are identified by the numbers of $j=12, j=27, j=45, j=105, j=107$, and $j=111$ (Methods, Eq.(27)-(30)).

Extended Data Table 11(d)| Six sets of solutions' calculated result in Constraint condition 4(Step 5)

$\mathbf{x}_j^p$		$j=12$	$j=27$	$j=45$	$j=105$	$j=107$	$j=111$
$\mu_{j_z}^{REAL}$	z_{4_2}	-0.5214	-0.6457	-0.2832	-1.0729	-0.2061	-1.0569
	z_{4_3}	-0.7396	-0.6838	-0.7381	-0.3877	-0.9128	-0.3512
Constraint condition 4 (Type4)		$g_{4_RDS} = \int_0^3 g_{4_PDF} \left(\phi_4 \left(\mathbf{z}_4, \mathbf{0}, \boldsymbol{\sigma}_{\mathbf{z}_4} \right) \right) ds$					
Calculate Result	g_{4_RDS}	0.4330	0.4251	0.4565	0.3780	0.4315	0.3808

Here, we select six sets of Non-inferior solutions for interpretation from the 127 non-inferior solutions in **Extended Data Table 1**. These six sets of solutions are identified by the numbers of $j=12, j=27, j=45, j=105, j=107$, and $j=111$ (Methods, Eq.(27)-(30)).