RSI,GARD Meta-Analysis

Cohort Summaries:
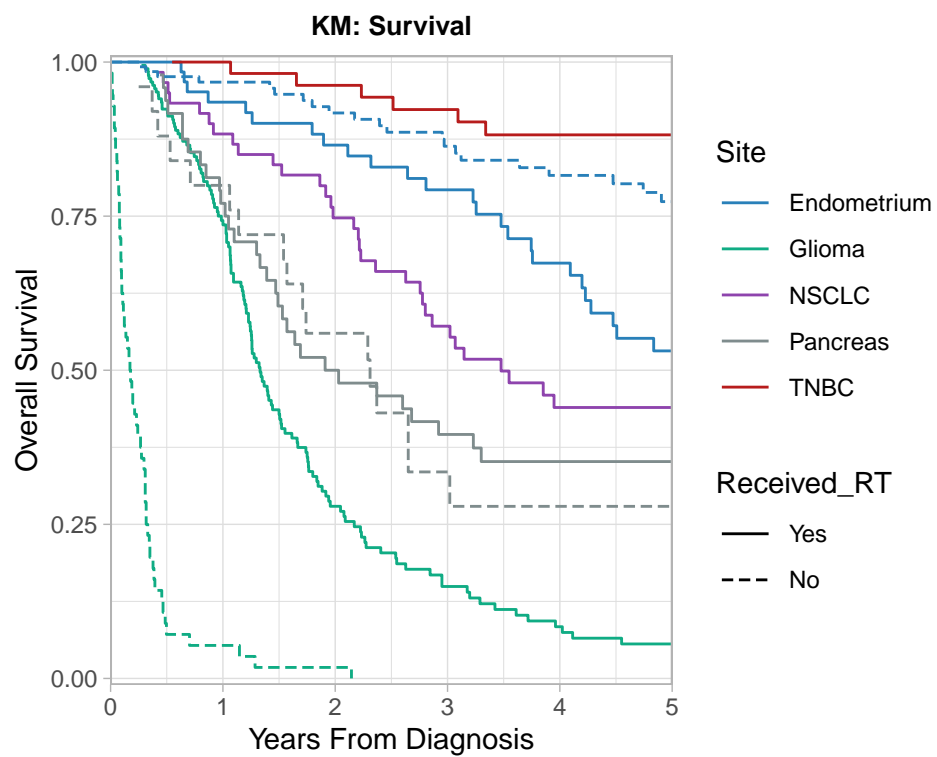
Site	1_+XRT	1_-XRT	5_+XRT	5_-XRT
Breast	0.970	0.951	0.720	0.773
TNBC	0.902		0.754	
Endometrium	0.968	0.963	0.768	0.924
Head and Neck	0.741		0.618	
NSCLC	0.809		0.534	

Table 1: KM Stats: First Recurrence

Site	1_+XRT	1_-XRT	5_+XRT	5_-XRT
TNBC	1.000		0.882	
Endometrium	0.935	0.967	0.531	0.774
Glioma	0.736	0.054	0.056	
NSCLC	0.883		0.440	
Pancreas	0.771	0.800	0.352	0.279

Table 2: KM Stats: Survival

KM: Survival
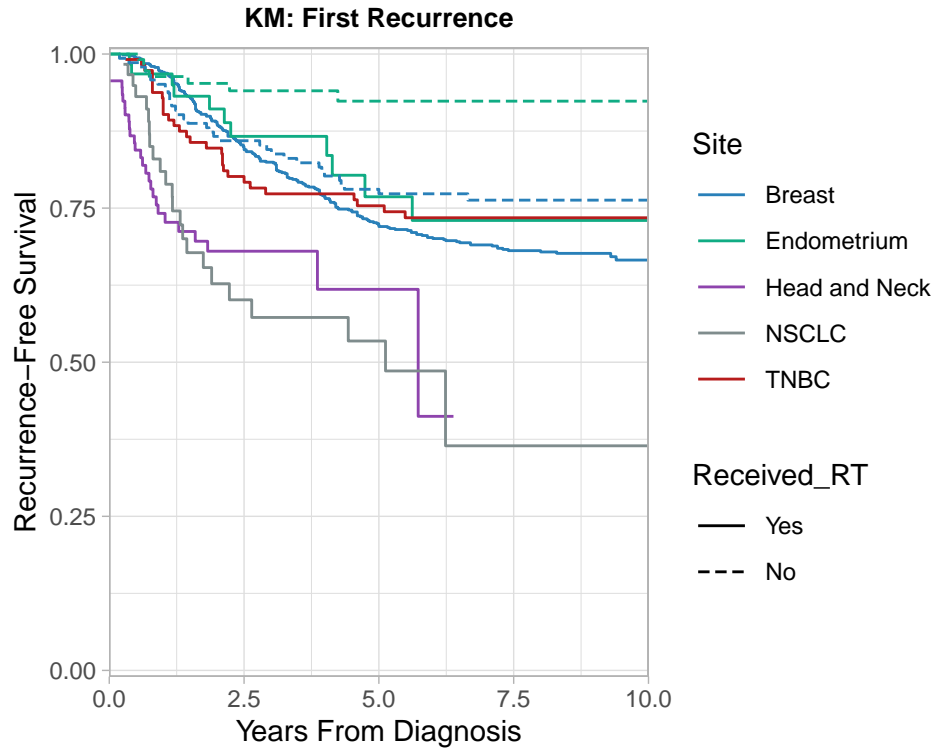
2. Forest Plots
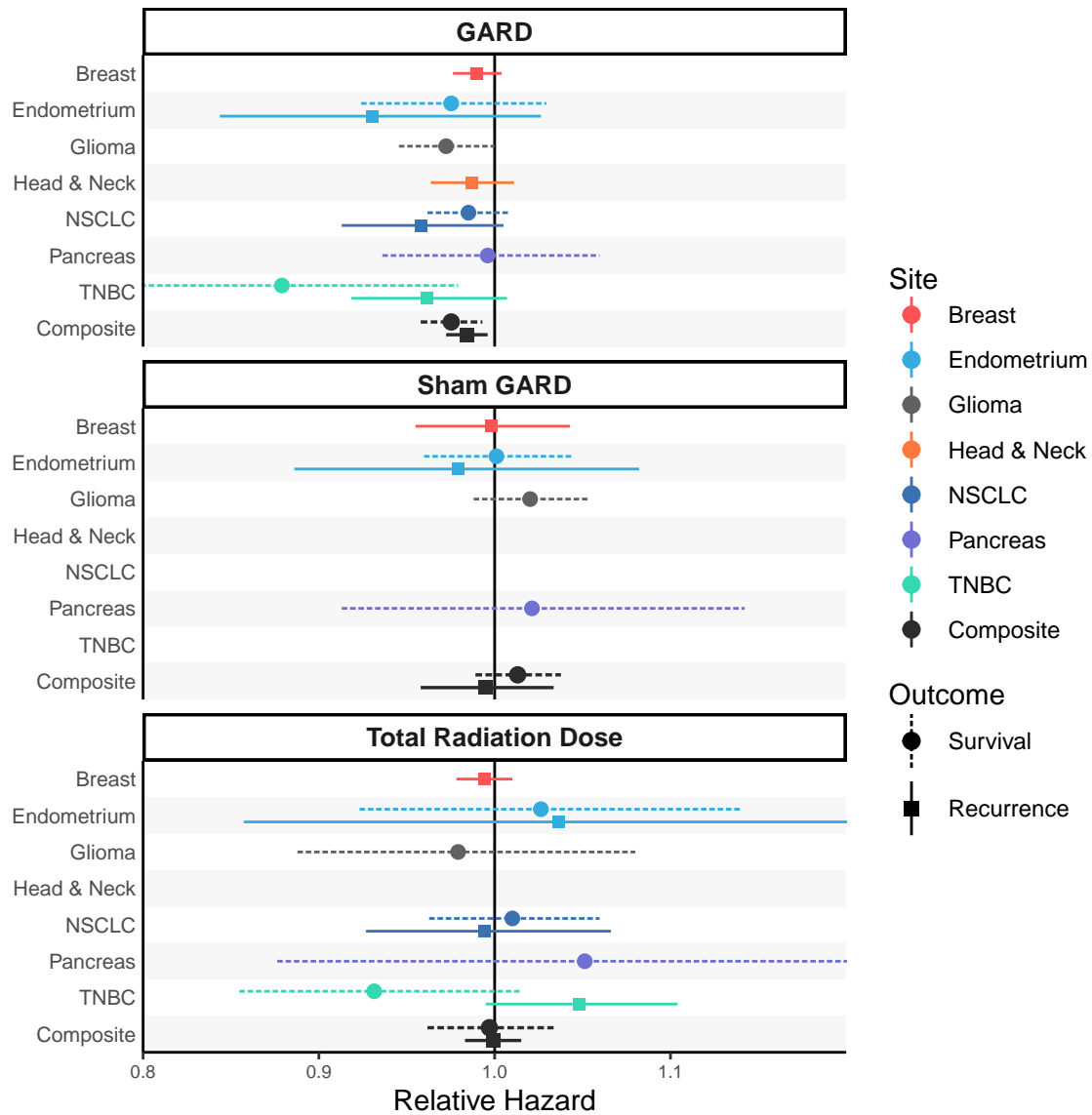
Outcome	Site	n	n.event	HR	xmin	xmax	p
Recurrence	Breast	644	209	0.990	0.976	1.004	0.171
Recurrence	Endometrium	63	11	0.931	0.844	1.026	0.139
Recurrence	Head & Neck	92	28	0.987	0.964	1.011	0.269
Recurrence	NSCLC	60	23	0.958	0.913	1.005	0.069
Recurrence	TNBC	113	29	0.962	0.919	1.007	0.081
Recurrence	Composite	972	300	0.984	0.972	0.996	0.004
Survival	Endometrium	63	33	0.975	0.924	1.029	0.353
Survival	Glioma	188	134	0.972	0.946	1.000	0.042
Survival	NSCLC	60	38	0.985	0.962	1.009	0.228
Survival	Pancreas	48	33	0.996	0.936	1.060	0.887
Survival	TNBC	55	9	0.879	0.789	0.979	0.017
Survival	Composite	414	247	0.975	0.958	0.993	0.005

Table 3: **CPH Results: GARD**

Outcome	Site	n	n.event	HR	xmin	xmax	p
Recurrence	Breast	644	209	0.994	0.978	1.010	0.488
Recurrence	Endometrium	63	11	1.037	0.857	1.254	0.705
Recurrence	Head & Neck						
Recurrence	NSCLC	60	23	0.994	0.927	1.066	0.857
Recurrence	TNBC	113	29	1.048	0.995	1.104	0.065
Recurrence	Composite	972	300	0.999	0.983	1.015	0.941
Survival	Endometrium	63	33	1.026	0.923	1.141	0.618
Survival	Glioma	188	134	0.979	0.888	1.080	0.669
Survival	NSCLC	60	38	1.010	0.963	1.060	0.663
Survival	Pancreas	48	33	1.051	0.876	1.261	0.580
Survival	TNBC	55	9	0.931	0.855	1.015	0.101
Survival	Composite	414	247	0.997	0.962	1.034	0.889

Table 4: **CPH Results: RT Dose**

Outcome	Site	n	n.event	HR	xmin	xmax	p
Recurrence	Breast	144	33	0.998	0.955	1.043	0.943
Recurrence	Endometrium	141	7	0.979	0.886	1.082	0.679
Recurrence	Composite	285	40	0.995	0.958	1.034	0.802
Survival	Endometrium	141	29	1.001	0.960	1.044	0.980
Survival	Glioma	56	56	1.020	0.988	1.053	0.208
Survival	Pancreas	25	17	1.021	0.913	1.142	0.713
Survival	Composite	222	102	1.013	0.989	1.038	0.286

Table 5: **CPH Results: Sham GARD**

Interaction Test
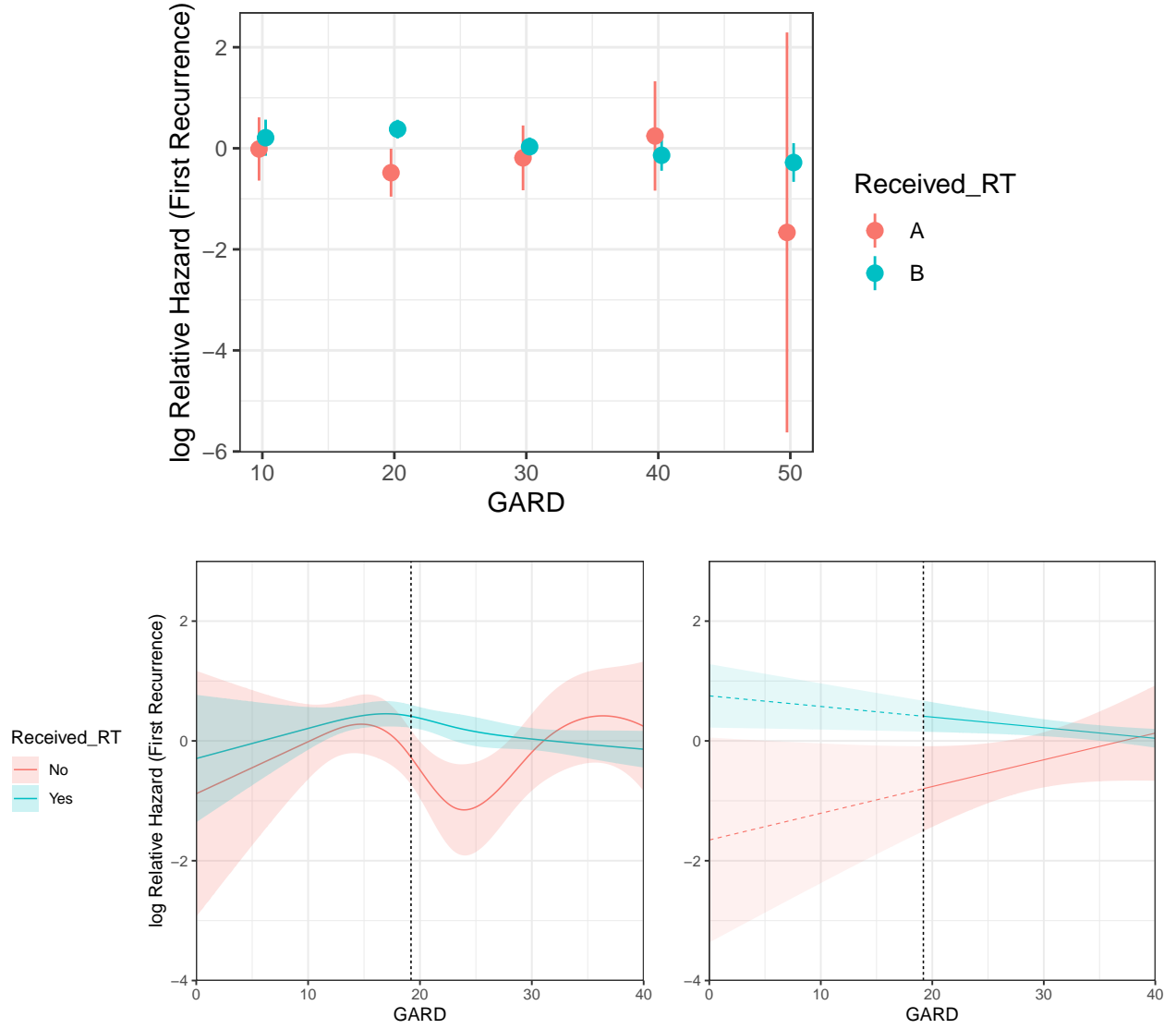
	Chi-Square	d.f.	P
Received_RT (Factor+Higher Order Factors)	6.35	2	0.042
GARD (Factor+Higher Order Factors)	8.73	2	0.013
Received_RT * GARD (Factor+Higher Order Factors)	0.05	1	0.816
TOTAL	14.27	3	0.003

Table 6: Interaction RTxGARD: Linear (Recurrence)

	Chi-Square	d.f.	P
Received_RT (Factor+Higher Order Factors)	11.68	5	0.039
GARD (Factor+Higher Order Factors)	20.55	8	0.008
Nonlinear (Factor+Higher Order Factors)	11.72	6	0.069
Received_RT * GARD (Factor+Higher Order Factors)	8.22	4	0.084

Table 7: Interaction RTxGARD: RCS (Recurrence)

	Chi-Square	d.f.	P
Received_RT (Factor+Higher Order Factors)	8.60	2	0.014
GARD (Factor+Higher Order Factors)	7.56	2	0.023
Received_RT * GARD (Factor+Higher Order Factors)	4.21	1	0.040
TOTAL	12.18	3	0.007

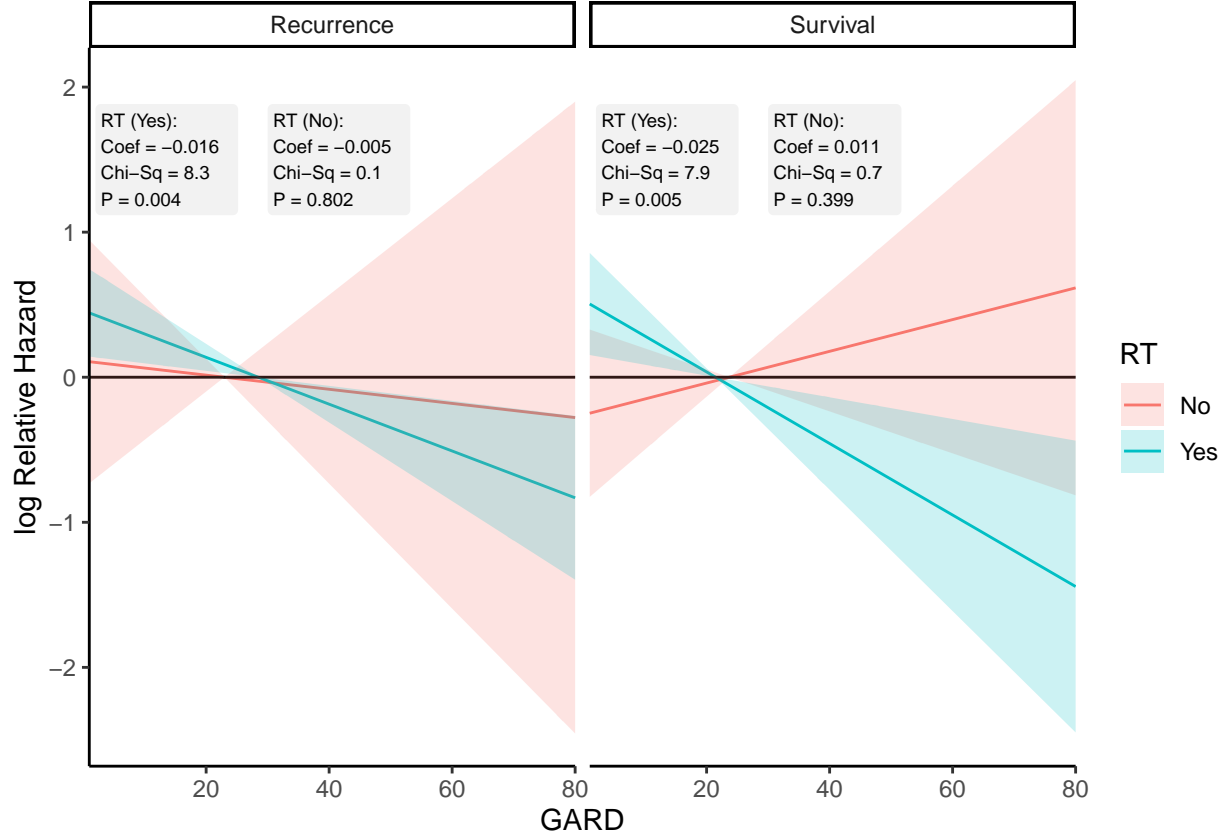Table 8: Interaction RTxGARD: GARD>19.2 (Recurrence)
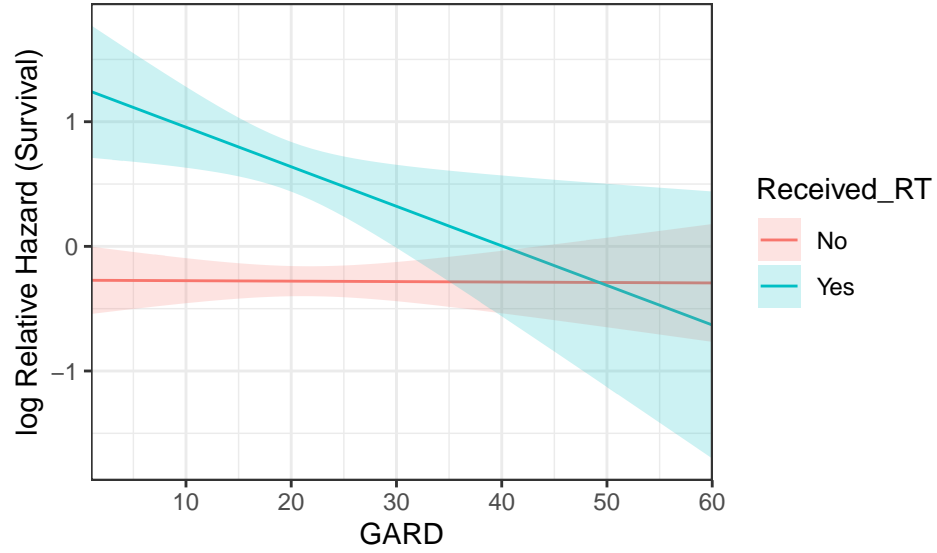
	Chi-Square	d.f.	P
GARD (Factor+Higher Order Factors)	5.68	2	0.059
Received_RT (Factor+Higher Order Factors)	44.30	2	0.000
GARD * Received_RT (Factor+Higher Order Factors)	4.96	1	0.026
TOTAL	46.20	3	0.000

Table 9: Interaction Test RTxGARD: Survival

Waterfall plots:
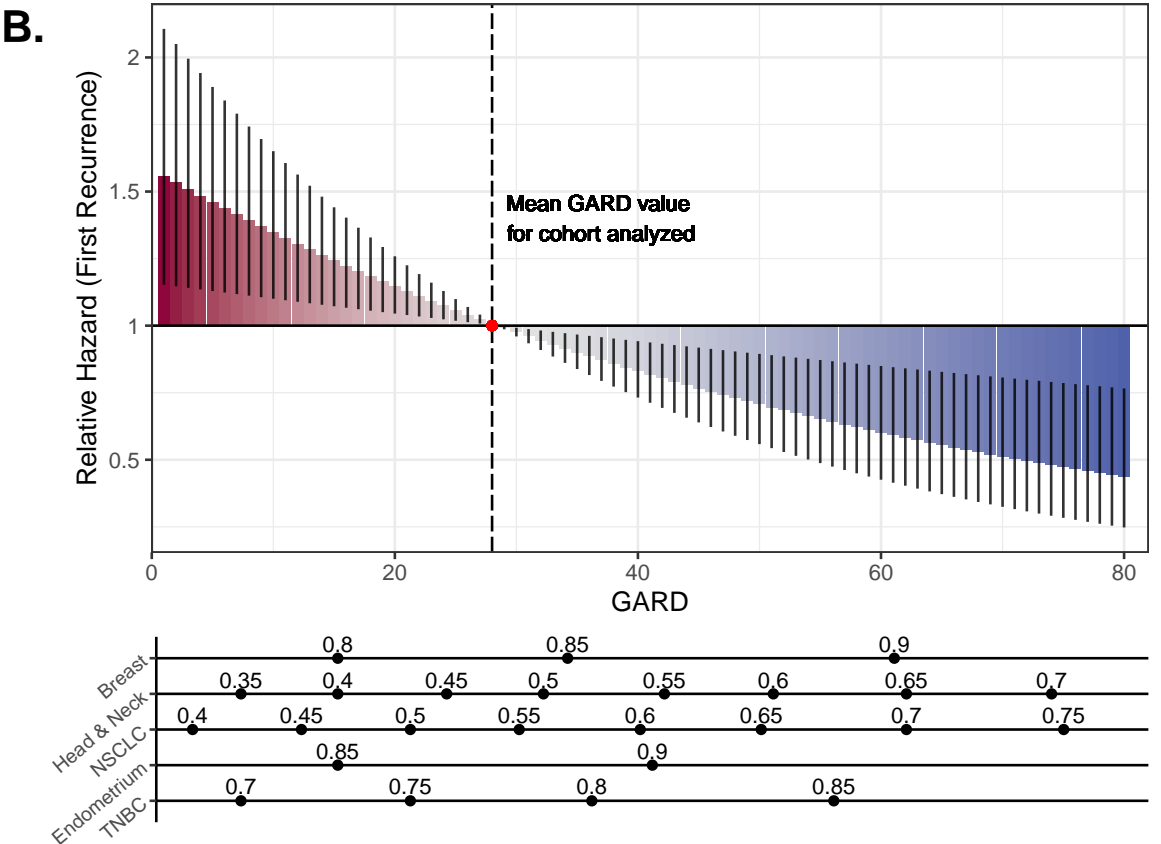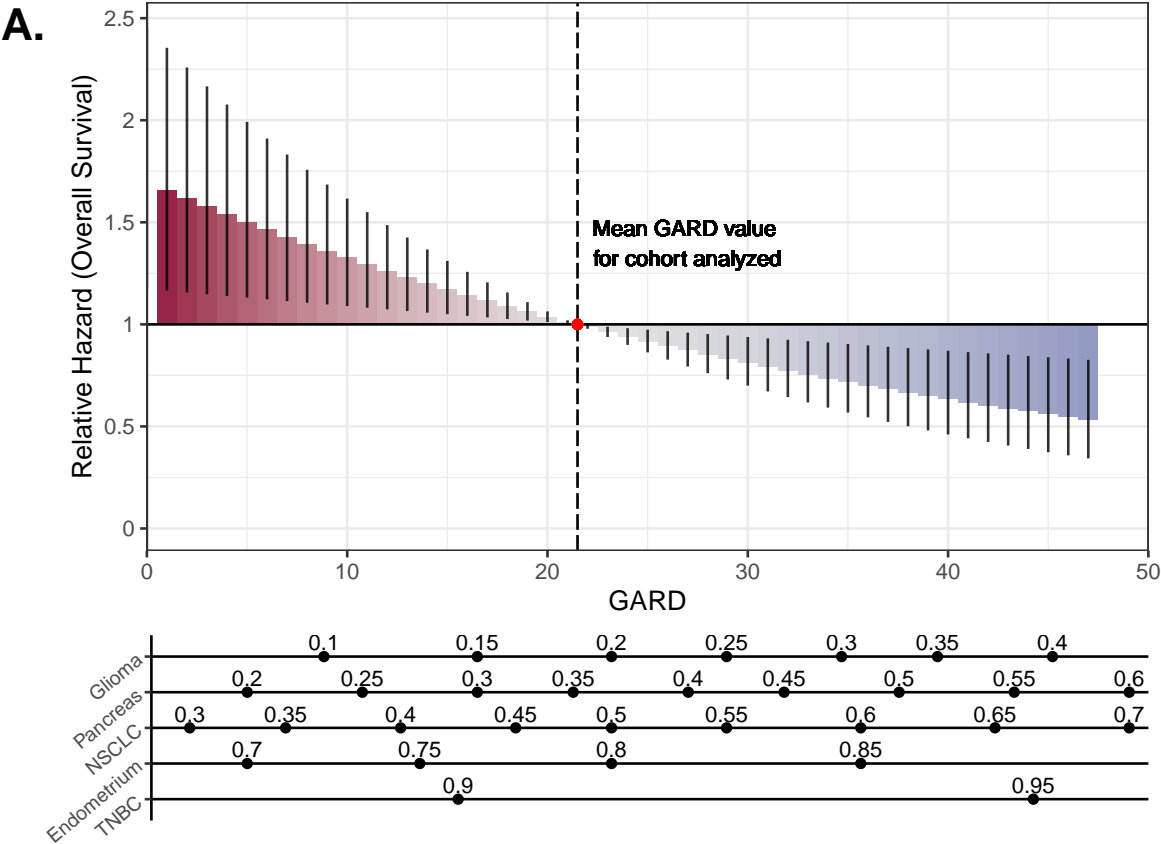
Line plots of log RH CPH models:

Dose-GARD Distribution Comparison