

MITRE / FLUX NOTES **TREATMENT OPTIONS v6**

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Concepts to approach in v6

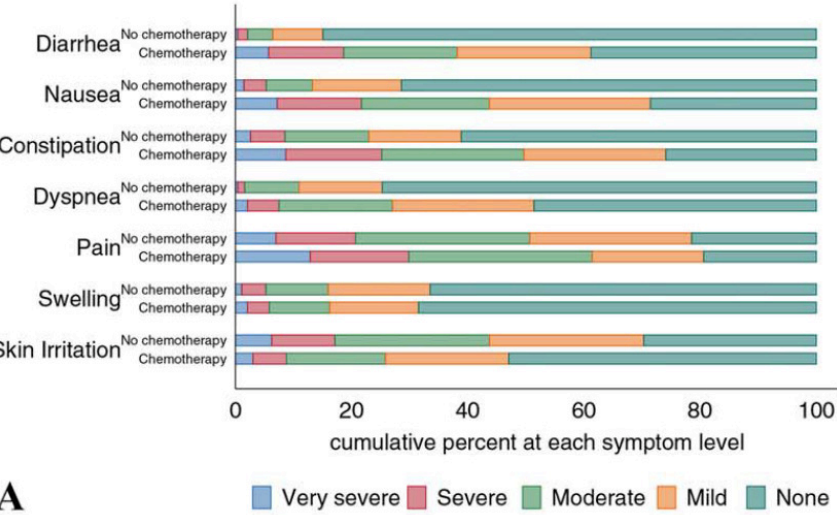
- Collaborative/patient centric view
- New ways to view and approach side effects
- Printing capabilities

One inspiration for viewing and understanding sidse effects:

Treatment-Associated Toxicities Reported by Patients With Early-Stage Invasive Breast Cancer

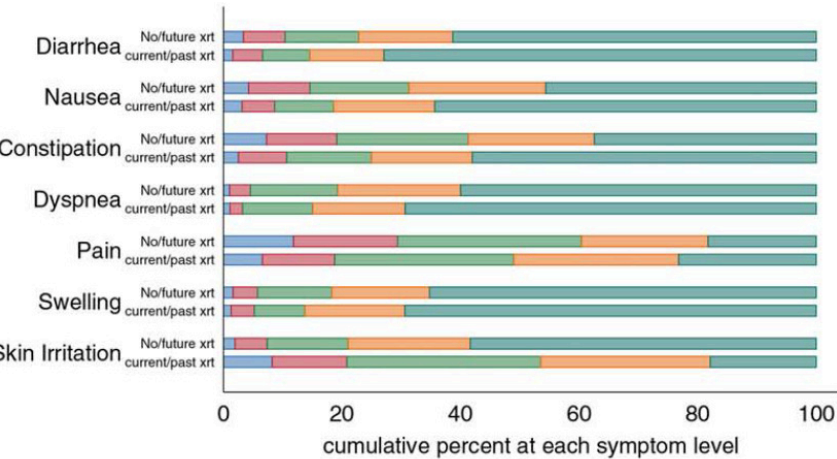
Christopher R. Friese, PhD^{1,2}; Jordan M. Harrison, BSN¹; Nancy K. Janz, PhD³; Reshma Jaggi, MD, DPhil⁴; Monica Morrow, MD⁵; Yun Li, PhD⁶; Ann S. Hamilton, PhD⁷; Kevin C. Ward, PhD⁸; Allison W. Kurian, MD^{9,10}; Steven J. Katz, MD^{11,12†}; and Timothy P. Hofer, MD^{11,13†}

Distribution of symptom severity by treatment status



A

Distribution of symptom severity by treatment status



Treatment Options

Ductal carcinoma of the breast

Outcomes and criteria for 156,765 patients with Ductal carcinoma of the breast were collected by CancerLinQ [...more](#)

- > Similar patients 156 patients
- excluded criteria:

race, received radiation therapy, received chemotherapy
- > Outcomes overall survival rate, ECOG impact, hospitalization due to side effects

Previous Design

Slightly different header layout: remove search and include mode/print

		Overall survival rates			ECOG impact	Hospitalization due to side effects	
		1 yr	2 yr	5 yr		all	leading causes
include only: add/remove							
surgery	(11)	67% <div><div></div><div></div><div></div></div>	54% <div><div></div><div></div><div></div></div>	43% <div><div></div><div></div><div></div></div>	0.2	19%	pain (9%) neuropathy (4%)
combine with: select treatments							
hormonal therapy & chemotherapy	(64)	87% <div><div></div><div></div><div></div></div> ▲20%	74% <div><div></div><div></div><div></div></div> ▲20%	58% <div><div></div><div></div><div></div></div> ▲15%	0.5 ▲0.3	15% ▼4%	pain (9%) dyspnoea (2%)
hormonal therapy	(76)	77% <div><div></div><div></div><div></div></div> ▲10%	59% <div><div></div><div></div><div></div></div> ▲5%	49% <div><div></div><div></div><div></div></div> ▲6%	0.5 ▲0.3	23% ▲4%	dyspnoea (11%) blood clots (4%)
chemotherapy	(12)	68% <div><div></div><div></div><div></div></div> ▲1%	53% <div><div></div><div></div><div></div></div> ▼1%	41% <div><div></div><div></div><div></div></div> ▼2%	0.9 ▲0.7	22% ▲3%	pain (11%) dyspnoea (7%)
<div><div></div>survived with surgery alone</div> <div><div></div>additional survivors due to treatment</div> <div><div></div>cancer related deaths</div> <div><div></div>deaths due to other causes</div>							

Compare these treatments [select treatments](#)

surgery alone	description of surgery
+ homonal therapy	more description
+ chemotherapy	another description
+ hormonal therapy & chemotherapy	yet another description

Using these outcomes [select outcomes](#)

overall survival rate	description of overall survival rate
reported severe side effects	description of this other metric

Collaborative view

- Print is available
- [Simpler visualizations](#)
- [More visualization options](#)
- [Remove collapsing menus, expose descriptions and make selections via popup menus.](#)

- [Considering removing patient filter here...?](#)
- [Include option to show numbers with/instead of of circles...?](#)



table



text



icons



chart

1 yr

2 yr

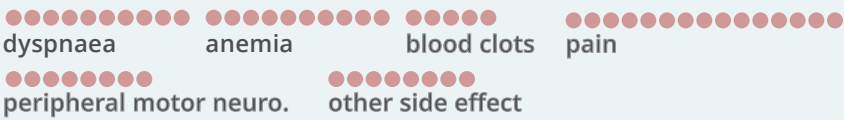
5 yr

Of every 100 patients...

overall survival:

number reporting severe effects:

surgery (11 patients)

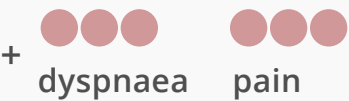


combined with:

hormonal therapy
& chemotherapy (64)

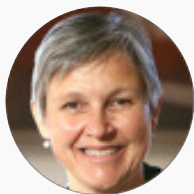


hormonal therapy (76)



chemotherapy (12)





Compare these treatments [select treatments](#)

surgery alone	description of surgery
+ homonal therapy	more description
+ chemotherapy	another description
+ hormonal therapy & chemotherapy	yet another description

Using these outcomes [select outcomes](#)

overall survival rate	description of overall survival rate
hospitalization due to side effects	description of this other metric

table **text** icons chart

1 yr 2 yr 5 yr

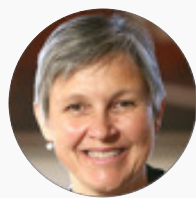
With **surgery alone**, **68%** of patients will survive 1 year, with 30% dying due to cancer. **10%** are hospitalized due to side effects, most commonly due to **pain**.

With **chemotherapy** in addition to surgery, **5% additional** patients will survive 1 year. **2% more** are hospitalized due to side effects, most commonly due to **neuropathy**.

With **chemotherapy & radiation** in addition to surgery, **12% additional** patients will survive 1 year. **4% more** are hospitalized due to side effects, most commonly due to **blood clots**.

Collaborative view

- additional views available in collaborative mode.



Compare these treatments [select treatments](#)

surgery alone

description of surgery

+ hormonal therapy

more description

+ chemotherapy

another description

+ hormonal therapy & chemotherapy

yet another description

Using these outcomes [select outcomes](#)

overall survival rate

description of overall survival rate

hospitalization due to side effects

description of this other metric





text



icons

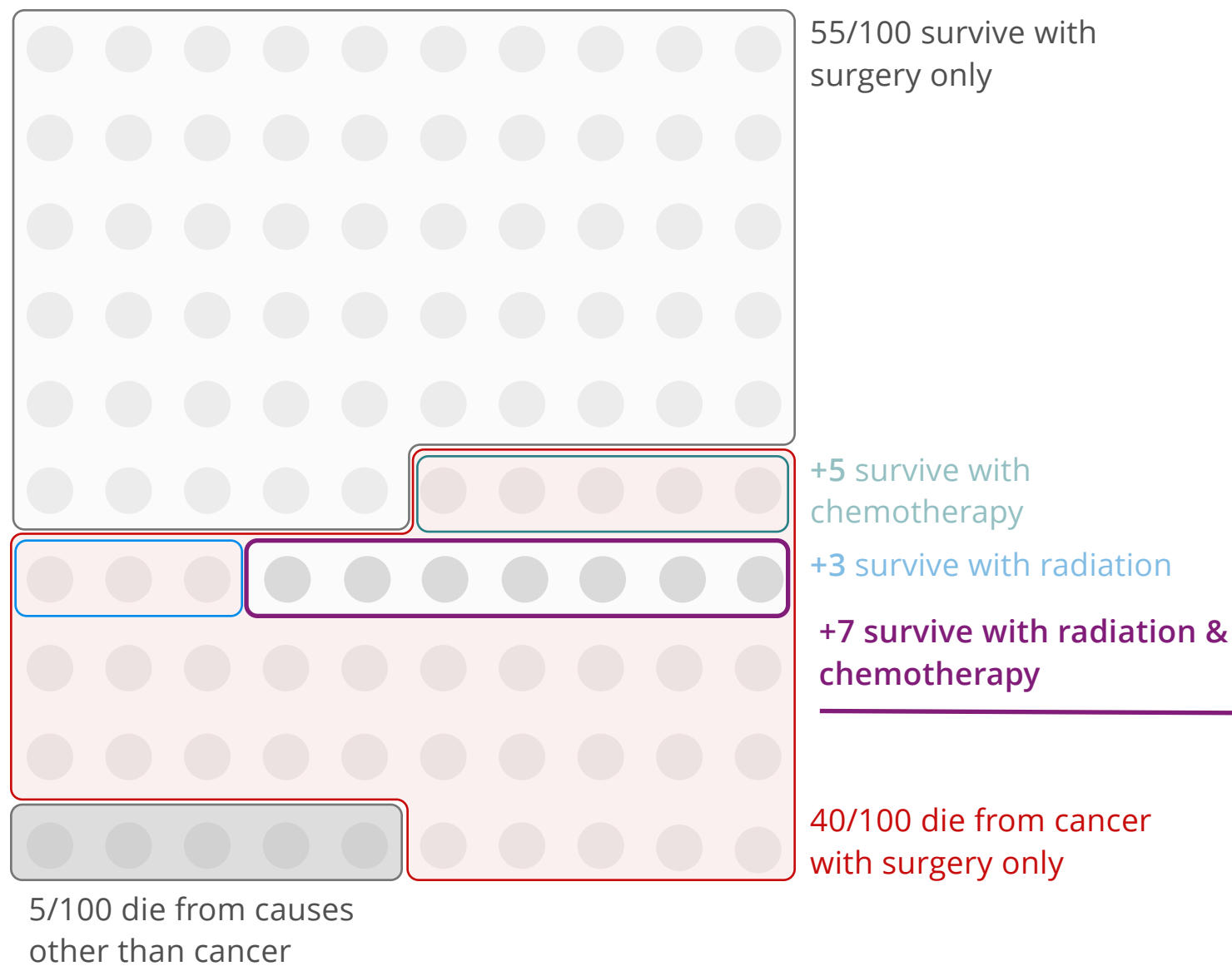


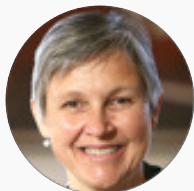
chart

1 yr

2 yr

5 yr





Compare these treatments [select treatments](#)

surgery alone

+ homonal therapy

+ chemotherapy

+ hormonal therapy & chemotherapy

description of surgery

more description

another description

yet another description

Using these outcomes [select outcomes](#)

overall survival rate

hospitalization due to side effects

description of overall survival rate

description of this other metric



table



text

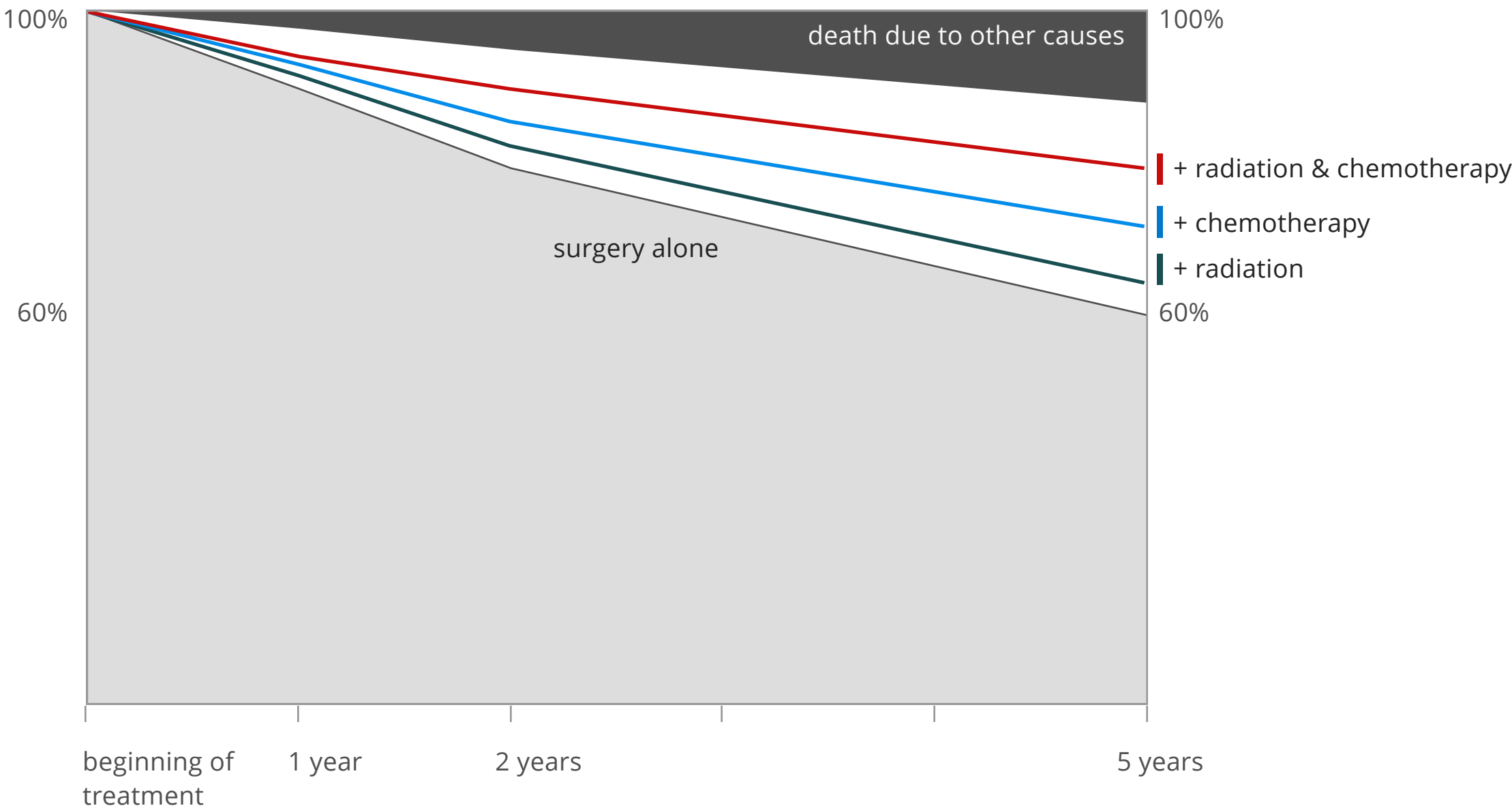


icons



chart

Patient survival over time



Compare these treatments [select treatments](#)

surgery alone	description of surgery
+ homonal therapy	more description
+ chemotherapy	another description
+ hormonal therapy & chemotherapy	yet another description

using these outcomes [select outcomes](#)

overall survival rate	description of overall survival rate
severe symptoms	description of this other metric

Other ideas

- Vertical table. More natural to list all reported side effects, as well as other information and notes. But less compact.
- This vertical layout could be an option, or could be default for certain types or quantities of data.
- Idea of % vs. #/100 vs. icons. Is there an option? Is one the best? Which one should we support first?

table

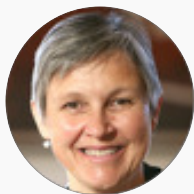
text

icons

chart

vs. Surgery Alone [\(show in table\)](#)

	+Radiation	+Chemotherapy	+Radiation & Chemotherapy
Overall Survival Rate			
<div>1 yr</div> 2 yr5 yr	+11	<div></div>	+21%
Reporting severe side effects in similar studies (ref.)	+19	<div></div>	+25%
Diarrhea	+6	<div></div>	+9%
Nausea	+4	<div></div>	+14%
Constipation	+2		+2%
Dyspnea	+12		+12%
Pain	+5	<div></div>	+9%
Swelling	+2	<div></div>	+4%
Skin Irritation	+10		+10%
Other possible serious side effects		blood clots (details)	blood clots (details)



Compare these treatments [select treatments](#)

surgery alone

description of surgery

+ homonal therapy

more description

+ chemotherapy

another description

+ hormonal therapy & chemotherapy

yet another description

using these outcomes [select outcomes](#)

overall survival rate

description of overall survival rate

general side effects

description of this other metric

Other ideas

- Using outside data that is not filtered by cohort. This can supplement ideas that may be weak on data and provide useful tools.
- Semi-quantitative data that is drawn from clinician experience, or processed from quantitative data.



table



text



icons



chart

vs. Surgery Alone [\(show in table\)](#)

	+Radiation	+Chemotherapy	+Radiation & Chemotherapy
Overall Survival Rate			
1 yr	+11% (71%)	+16% (76%)	+21% (81%)
2 yr			
5 yr			

General experience of side effects (not filtered)

Diarrhea	▼	▼	▼▼
Nausea		▼▼▼▼	▼▼▼▼
Constipation	▼▼		▼▼
Dyspnea	▼		▼
Pain	▼	▼▼	▼▼
Swelling	▼		▼
Skin Irritation	▼▼▼▼		▼▼▼▼

Other possible serious side effects

blood clots
[\(details\)](#)

blood clots
[\(details\)](#)

