

# Interest, attitudes, and participation in clinical trials among patients with lymphomas

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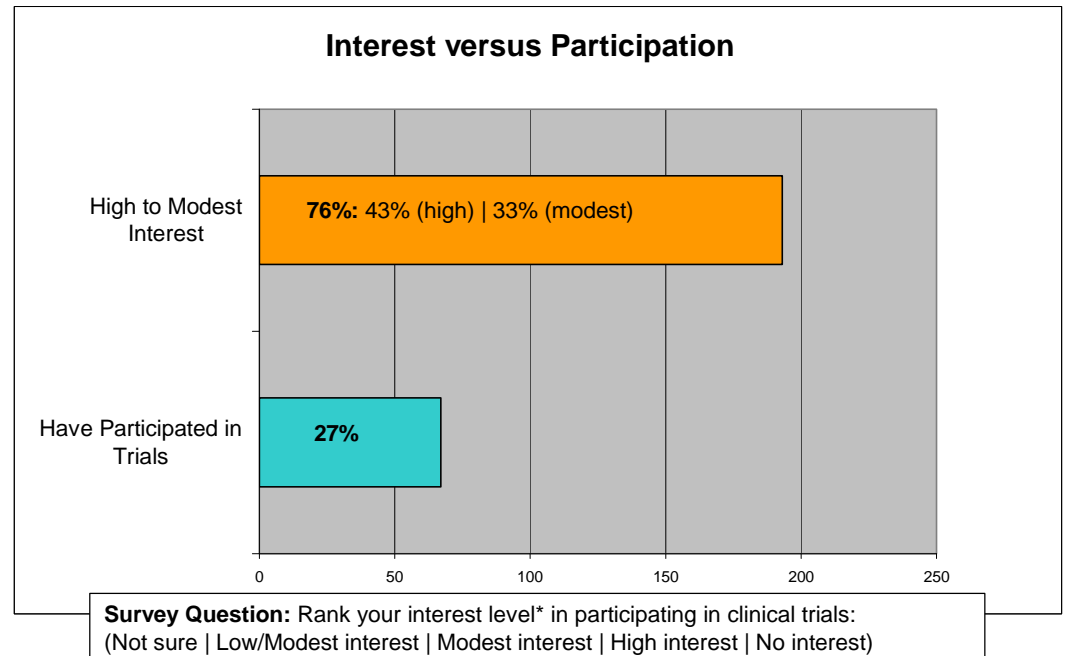
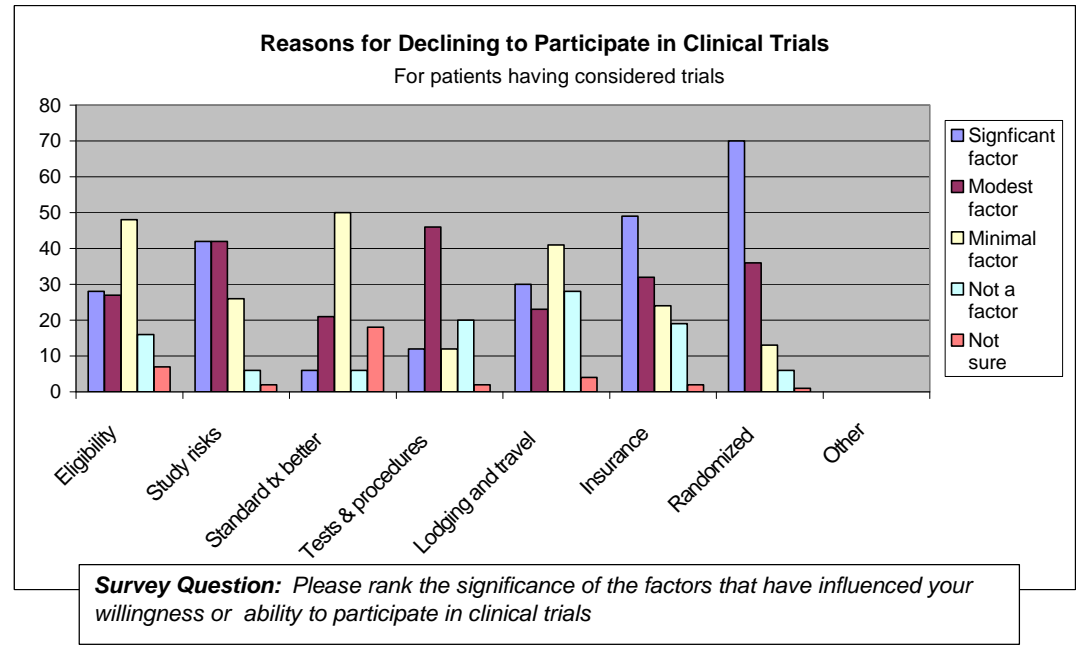
**Purpose:** There are an increasing number of investigational agents for lymphomas and a limited patient pool. It's estimated that less than 5% of available patients enroll in clinical trials. Thus, identifying obstacles to enrollment is vital to making progress.

**Methods:** We developed two related Internet-based surveys: One for patients who have "talked to a doctor about a study, or have seriously evaluated trials"; a second for patients who "have never seriously evaluated a clinical trial as a possible treatment for lymphoma." We have collected clinical information for analysis, such as grade, treatment status, time since diagnosis, time to first treatment, how the population has learned about trials, attitudes towards trials, and reasons participation in a trial was declined. See survey: <http://www.lymphomation.org/ps1.htm>

**Limitation:** This was a non-random sample. Survey participation required access to the Internet and participation in online support groups.

**Results:** Of the 251 participants surveyed, half have considered clinical trials (125), and half have not. Of those who have considered trials, 47% have not participated. Reasons cited for declining to participate will be presented, along with patient-centered interpretations. We have also captured data on factors that may influence interest, consideration, and participation in clinical trials. Concerns about randomization was the main reason cited for declining to participate in a trial, followed by doubts about insurance coverage, risks, and trial eligibility. Among all survey participants 109 (44%) have reported a high interest level in participating in clinical trials.

**Conclusion:** In this survey of lymphoma patients and caregivers who have access to the Internet, 67 of 251 (27%) report that the patient has participated in one or more clinical trials, which is well above the often-cited 3 to 5% clinical trial participation rate. These findings suggest that study design should focus on real and perceived risks of participation, and that patient interest is not the main obstacle to enrollment in clinical trials.



**POPULATION CHARACTERISTICS**

**Survey participants:** Lymphoma Patients and Caregivers with Web Access

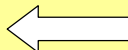
**Method:** Survey <http://www.lymphomation.org/ps1.htm>

**Purpose:** To identify factors that may determine interest and participation in clinical trials

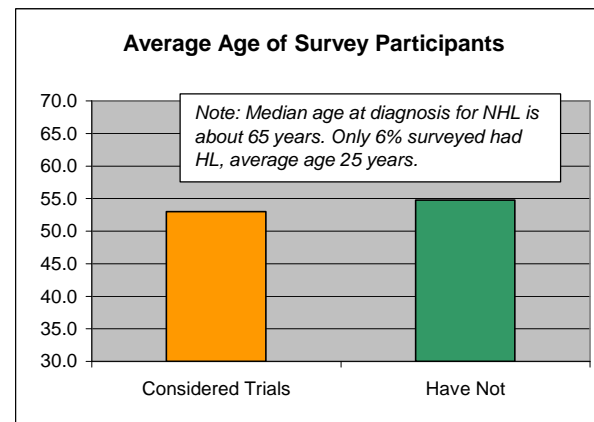
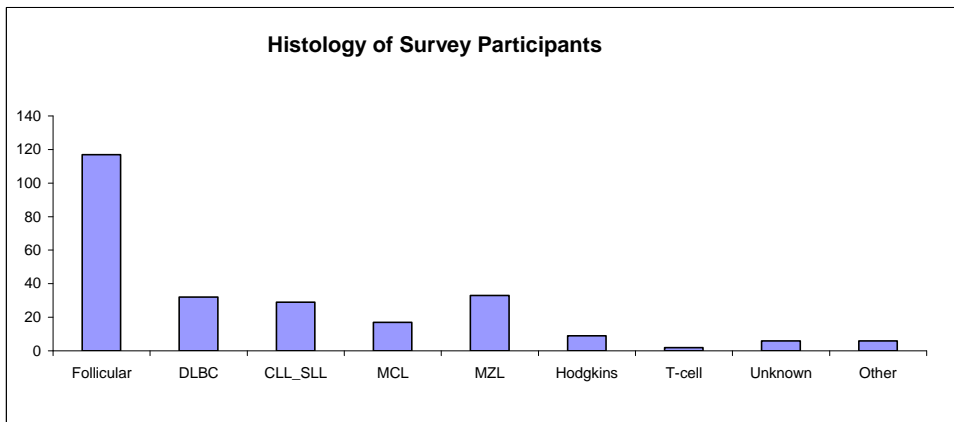
**Participants in Survey:** 251

CONSIDERED TRIALS				HAVE NOT YET CONSIDERED TRIALS				OVERALL	
<i>I've talked to a doctor about a study to treat my lymphoma, or I've seriously evaluated trials on my own - looked carefully at study protocol(s).</i>				<i>I've never seriously evaluated a clinical trial as a possible treatment for my lymphoma.</i>					
<b>By Gender and Cell Type:</b>				<b>By Gender and Cell Type:</b>				<b>Overall</b>	<b>%</b>
Females	66	52%	.....	Females	88	70%	.....	154	61%
Males	60	48%	.....	Males	37	30%	.....	97	39%
Count	126		.....	Count	125		.....	251	100%
Follicular	69	55%	.....	Follicular	48	38%	.....	117	47%
DLBC	7	6%	.....	DLBC	25	20%	.....	32	13%
CLL_SLL	17	13%	.....	CLL_SLL	12	10%	.....	29	12%
MCL	10	8%	.....	MCL	7	6%	.....	17	7%
MZL	11	9%	.....	MZL	22	18%	.....	33	13%
Hodgkins	7	6%	.....	Hodgkins	2	2%	.....	9	4%
T-cell	1	1%	.....	T-cell	1	1%	.....	2	1%
Unknown	2	2%	.....	Unknown	4	3%	.....	6	2%
Other	2	2%	.....	Other	4	3%	.....	6	2%

<i>Of entire population:</i>	<b>67</b>	<b>27%</b>	<u>have participated</u> in a clinical trial
	<b>184</b>	<b>73%</b>	<u>have not participated</u>
	<b>126</b>	<b>50%</b>	<u>have considered</u> a clinical trial
	<b>125</b>	<b>50%</b>	<u>have not considered</u>



**Main Findings**  
Clinical Trials Consideration and Participaton



## INTEREST AND PARTICIPATION IN CLINICAL TRIALS

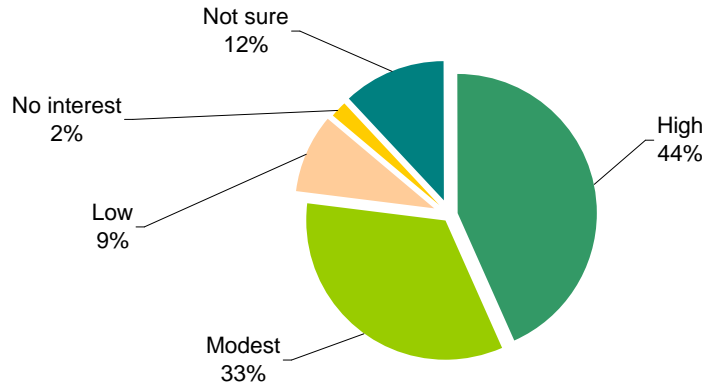
### Participation in Clinical Trials (Overall)

	Number	of	Surveyed	%
Participated in trial:	67		251	27%
Have not:	184			73%

### Interest Level in Clinical Trials

	No Interest	Low	Some / Modest	High	Not sure		N	%	
Considered trials	1	4	32	88	1	High Interest in trials	109	43%	
Not Considered	4	19	52	21	29		Modest	84	33%
Participated in trial	0	0	4	62	0		Low	23	9%
Overall	5	23	84	109	30		No interest	5	2%
%	2%	9%	33%	43%	12%		Not sure	30	12%

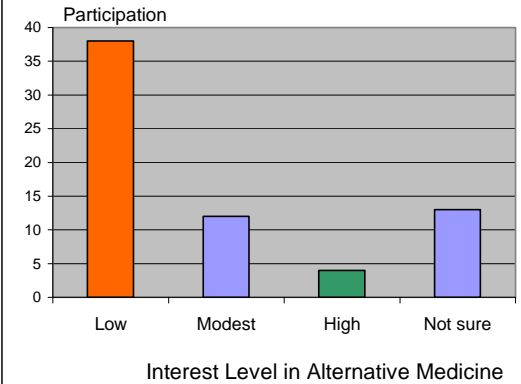
### Interest Level In Clinical Trials



**Survey Question:** Rank your interest level\* in participating in clinical trials:  
(Not sure | Low/Modest interest | Modest interest | High interest | No interest)

\* By "interest level" we mean an expectation that clinical trials may provide access to therapies that can be superior to approved therapies and provide clinical benefit.

### Inverse Relationship Between Alternative Medicine Expectations and Participation in Clinical Trials



**Survey Question:** Please rank your expectation in the potential of alternative medicine\* to treat lymphoma. (Not sure | Low | Modest | High)

## PARTICIPATION IN CLINICAL TRIALS

### Participation in Clinical Trials: Number

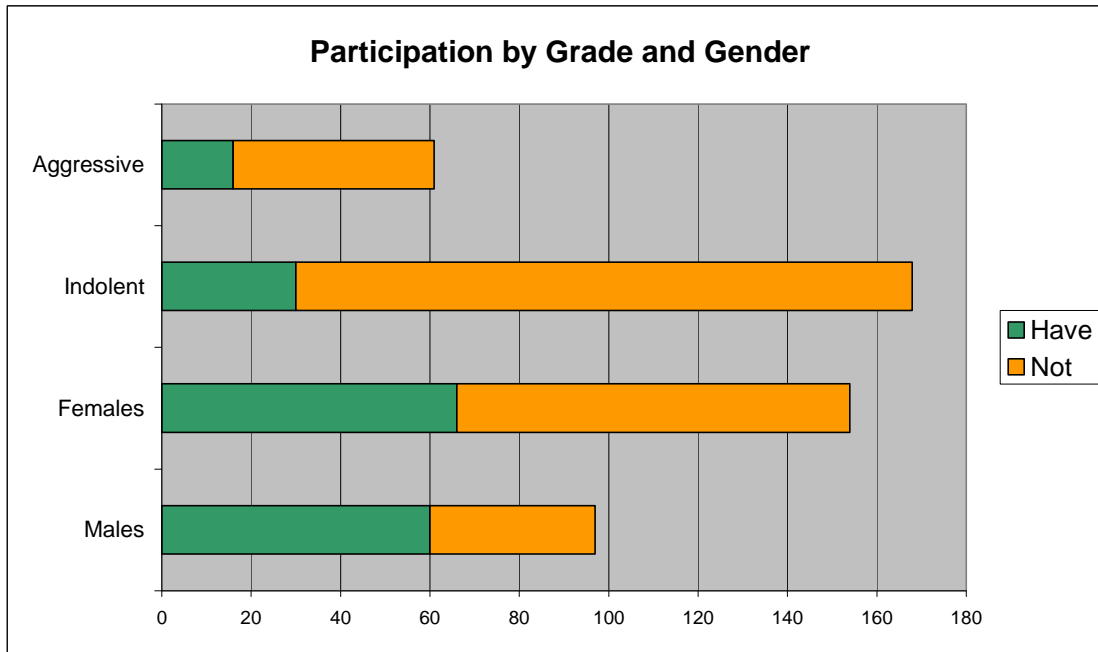
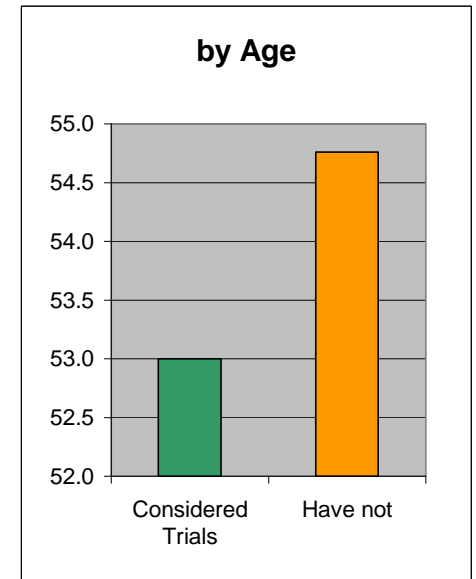
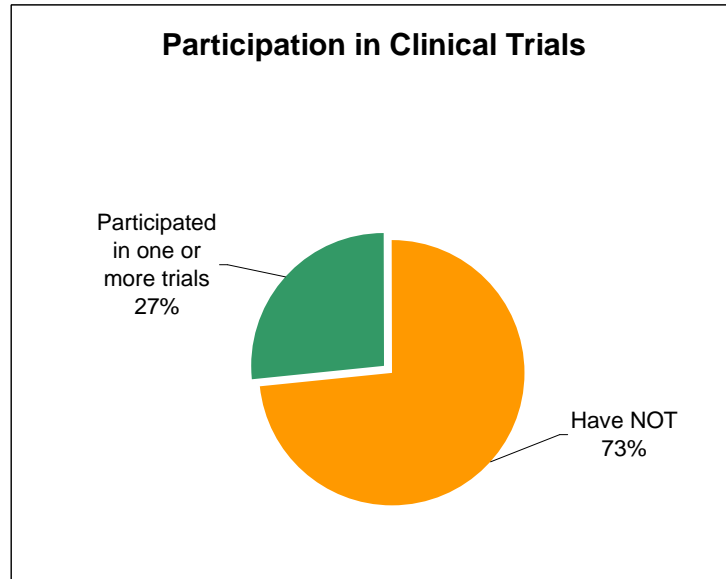
No of Trials	N	%	
		Overall	Considered
None	184	73%	47%
One or more trials	67	27%	53%
1	53	21%	42%
2	11	4%	9%
3 or more	3	1%	2%
More than one	67	27%	53%
Trials enrolled now	40	16%	32%

### Participation by Gender

Participated?	HAVE	NOT	% Have
Females	66	88	43%
Males	60	37	62%

### Participation by Grade

	by Grade	% of	
		Consid- ered	% overall
Indolent	30	18%	12%
Aggressive	16	26%	6%



	Have	Not	%
Males	60	37	24%
Females	66	88	38%
Indolent	30	138	12%
Aggressive	16	45	18%

## CLINICAL STATUS OF SURVEY PARTICIPANTS

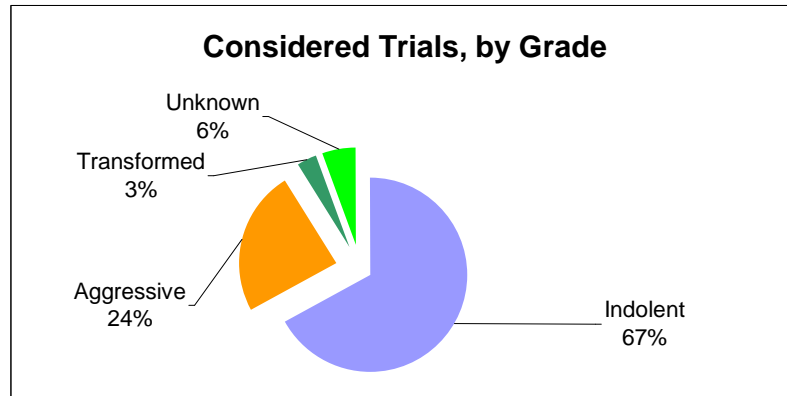
### Consideration and participation in clinical trials by grade

#### Untreated by Grade:

Grade	Indolent	Aggressive	Transformed	Unknown
Considered trials:	16	2	0	0
Not considered:	14	1	0	0
Total:	30	3	0	0
%	12%	1%	0%	0%

#### By Grade only:

Grade	Indolent	Aggressive	Transformed	Unknown
Considered trials:	92	28	3	3
Not considered:	76	33	5	11
Both groups:	168	61	8	14
% considered trials	67%	24%	3%	6%



### Consideration and participation in clinical trials by clinical status

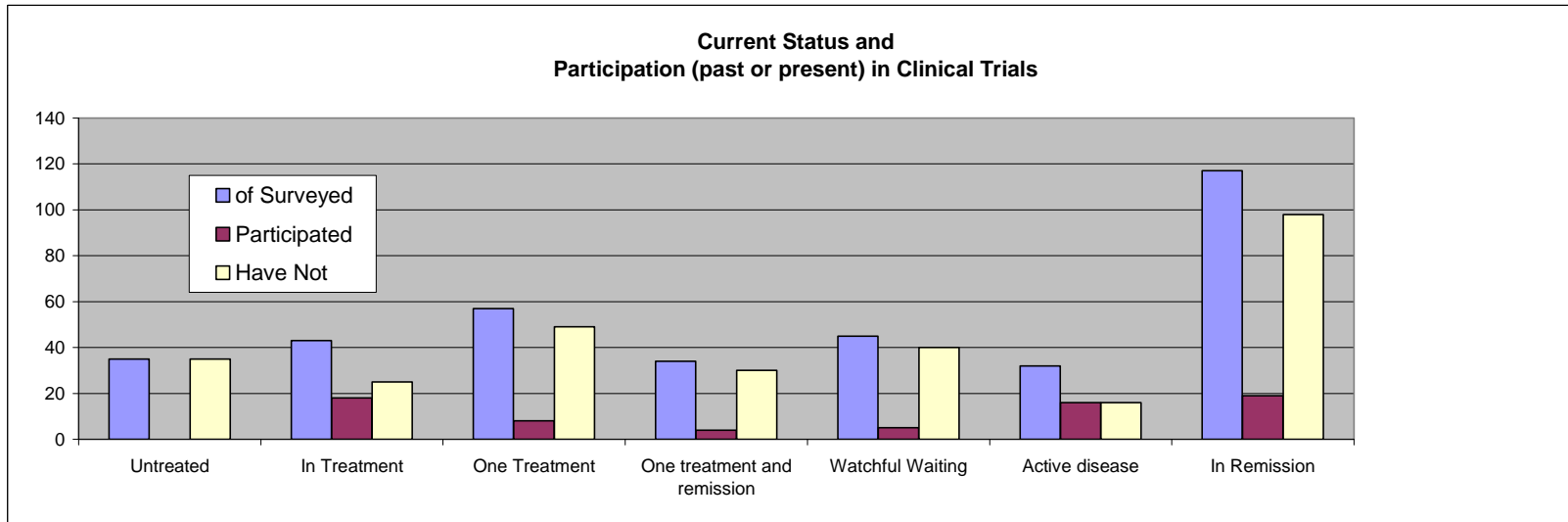
Clinical Status	No Tx	% group	Remission	% group	In Tx	% group	One Tx	% group	W&W	% group	Active	% group
Considered trials:	18	14%	57	45%	26	21%	23	18%	21	17%	20	16%
Not considered:	17	14%	60	48%	17	14%	34	27%	24	19%	12	10%
Overall:	35	14%	117	47%	43	17%	57	45%	45	36%	32	25%
Participated & % of considered	NA	NA	29	51%	19	73%	8	35%	5	24%	16	80%

**No Tx** = I have never been treated | **Remission** = I am in remission following treatment (no detected evidence of disease)

**In Tx** = I am receiving treatment | **One Tx** = I have had only one treatment course\* for lymphoma

**W&W** = I have detected disease but am being monitored (watchful waiting) | **Active** = I have active disease and I'm receiving treatment, or will need treatment soon

\* A treatment course could be a single agent, combination or sequential therapy. It could include maintenance therapy, such as Rituxan given after chemotherapy on a regular basis.



**CLINICAL STATUS OF SURVEY PARTICIPANTS (continued)**

**Histology and Clinical Status of Survey Participants**

Histology & Grade	Overall	Active disease	W&W	Never Tx	Previous Tx	Remission	In Tx	Once Tx
Follicular	117	17	27	16	101	52	20	30
DLBC	32	5	0	2	30	24	3	4
CLL_SLL	29	5	9	10	19	7	5	4
MCL	17	0	0	1	16	11	5	4
MZL / MALT	33	4	7	4	29	11	5	11
Hodgkins	9	1	0	0	9	5	3	2
T-cell	2	0	0	0	2	0	2	0
Unknown	6	0	1	2	4	2	0	2
Other	6	0	1	0	6	5	0	0
<b>OVERALL</b>	<b>251</b>	<b>32</b>	<b>45</b>	<b>35</b>	<b>216</b>	<b>117</b>	<b>43</b>	<b>57</b>
Aggressive	61	9	0	3	58	41	11	8
Indolent	168	21	43	30	138	62	30	39
Transformed	8	0	0	0	8	6	2	3
Unknown grade	14	2	2	2	12	8	0	7
	251	32	45	35	216	117	43	57

**Current Status and Participation (past or present) in Clinical Trials**

	of Surveyed	Participated	Have Not	Participation %
Untreated	35	0	35	0%
In Treatment	43	18	25	42%
One Treatment	57	8	49	14%
One treatment and remission	34	4	30	12%
Watchful Waiting	45	5	40	11%
Active disease	32	16	16	50%
In Remission	117	19	98	16%

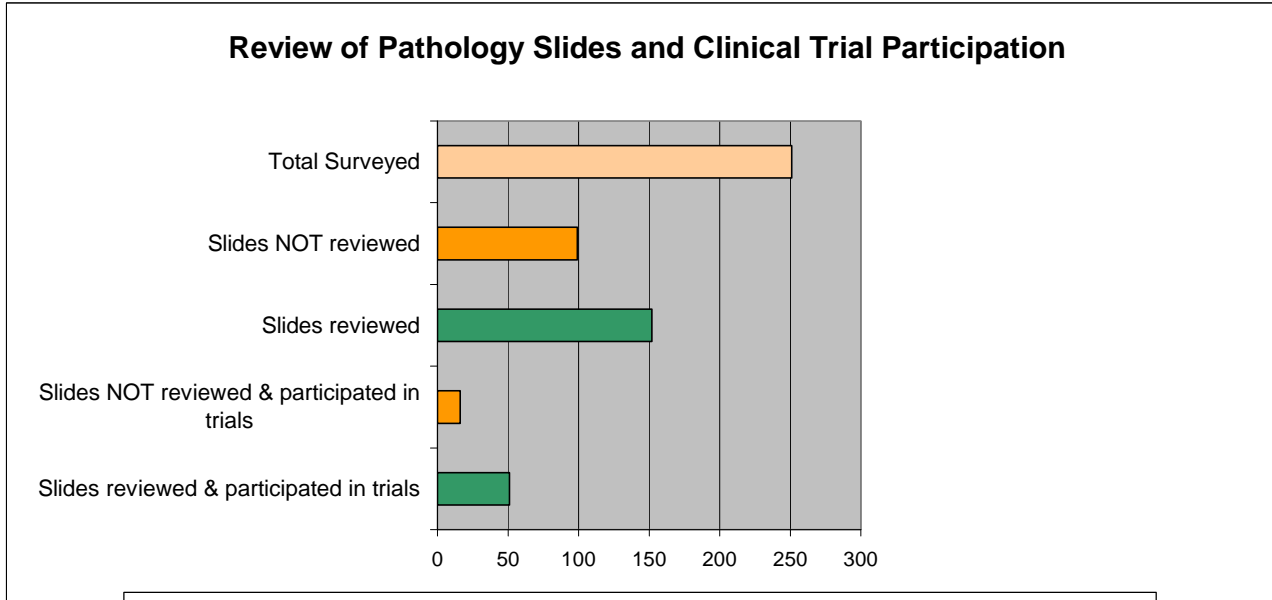
**FACTORS THAT MIGHT PREDICT INTEREST AND PARTICIPATION**

**Second review of pathology slides**

2nd Pathology?	Yes	%	No	%	Not sure	%
Considered trials:	91	72%	31	25%	4	3%
Not Considered:	61	49%	55	44%	9	7%
Overall:	152	61%	86	34%	13	5%
Participated	51	40%	16	13%	2	2%

\* This review could be a significant predictive factor of participation in a clinical trial. We do not know from this survey if the review of slides was initiated by the patient or his or her physician.

20% of all surveyed participants

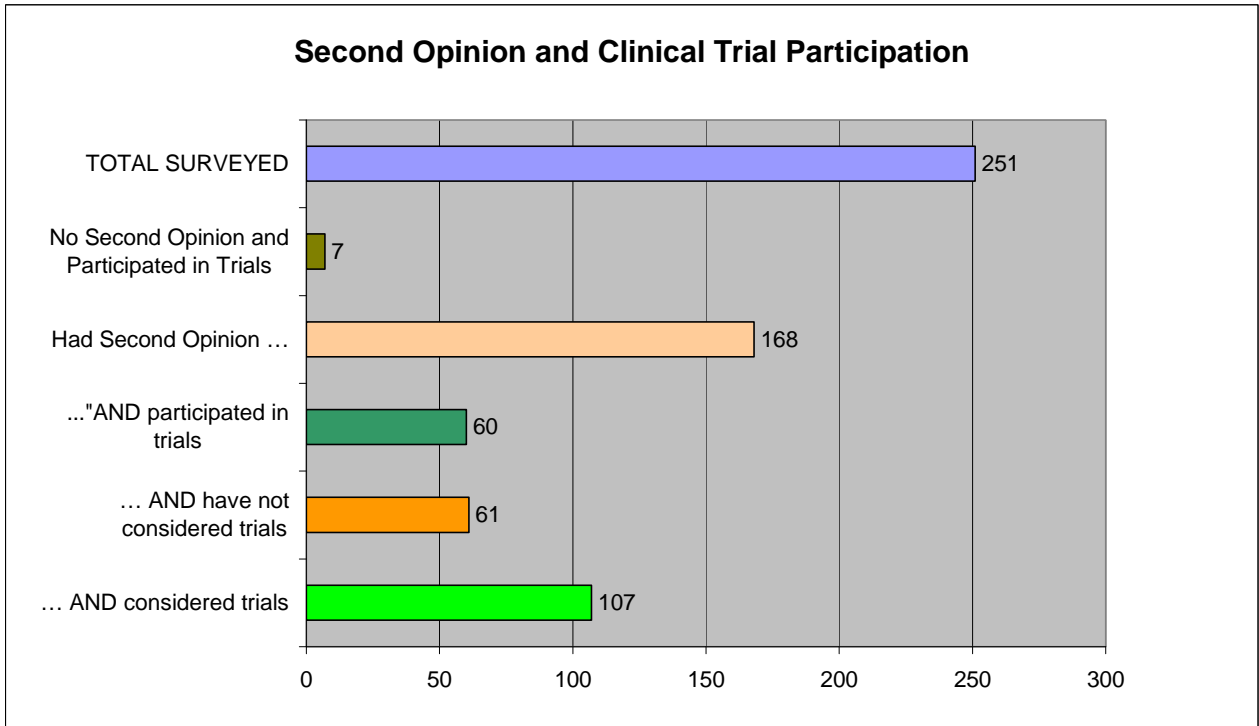


**Survey question:** I have had my biopsy slides reviewed a second time by an independent pathologist (Not sure | Yes | No)

**FACTORS THAT MIGHT PREDICT INTEREST AND PARTICIPTION (continued)**

**Have had second opinion**

Second Opinion:	Yes	%	No	%	Not sure	%
Considered trials:	107	85%	16	13%	3	2%
Not Considered:	61	49%	59	47%	4	3%
Overall:	168	67%	75	30%	7	3%
Participated	<b>60</b>	<b>48%</b>	7	6%	1	1%
		24%	% of all surveyed participants			



**Discussion:** These responses suggests that patients who are proactive or have higher risk lymphoma (desire or need to receive a second opinion) are more likely to receive information about clinical trials and participate.



## Factors That May Predict Interest and Participation

### Oncologist is investigator

Answer	Yes	%	No	%	Not sure	%
Considered clinical trial	66	52%	39	31%	21	17%
Not Considered:	30	24%	34	27%	61	49%
Overall:	96	38%	73	29%	82	33%
Participated	42	33%	25	20%	7	6%
		17%	% of all surveyed participants			

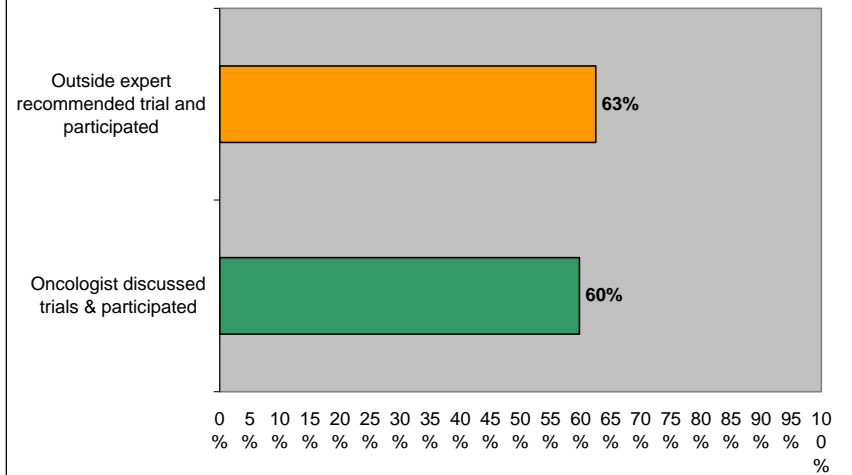
### Oncologist is lymphoma specialist

Answer	Yes	%	No	%	Not sure	%
Considered clinical trial	75	60%	44	35%	7	6%
Not Considered:	50	40%	50	40%	9	7%
Overall:	125	50%	94	37%	16	6%
Participated	44	35%	23	18%	3	2%
		18%	% of all surveyed participants			

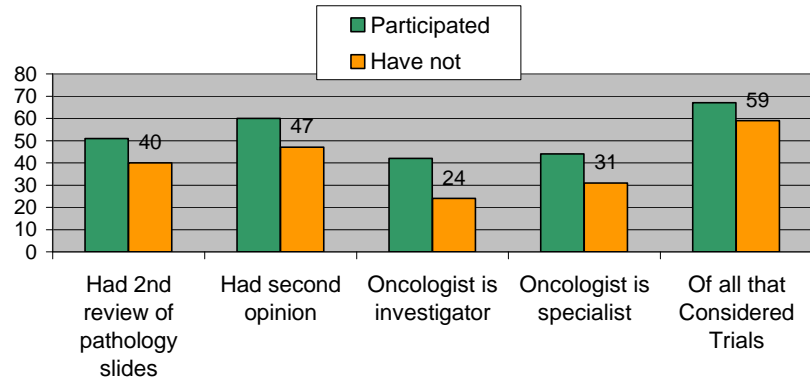
### Specialist recommended clinical trial

Answer	Yes	%	No	%	Not sure	%
Considered clinical trial	25	20%	17	13%	7	6%
Not Considered:	13	10%	55	44%	9	7%
Overall:	38	15%	72	29%	16	6%
Participated	55	44%	5	4%	0	0%
		22%	% of all surveyed participants			

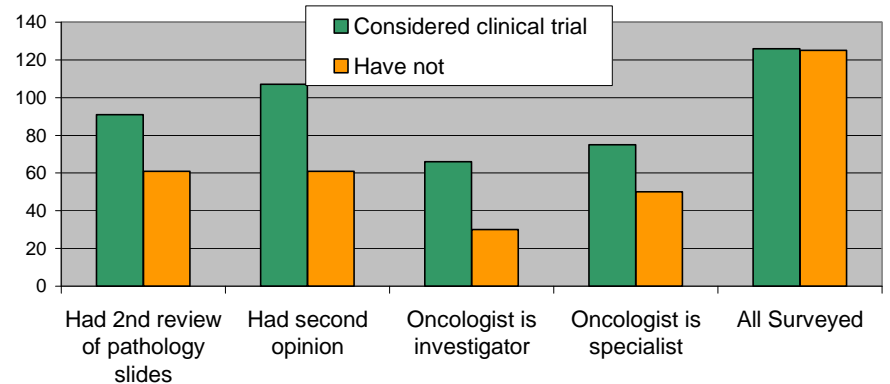
### Recommendation / Discussion and Participation Rate



### Factors That May Predict Participation in Clinical Trials



### Factor that May Predict Consideration of Clinical Trials



## HOW PATIENTS LEARNED ABOUT TRIALS

### Survey question:

Please check the different ways you have learned about clinical trials:

- \* My oncologist
- \* An outside lymphoma expert I consulted
- \* Internet?... \* Lymphomation.org website |
- \* Drug sponsors presentation or advertisement
- \* Online support groups (patient to patient)
- \* Other?

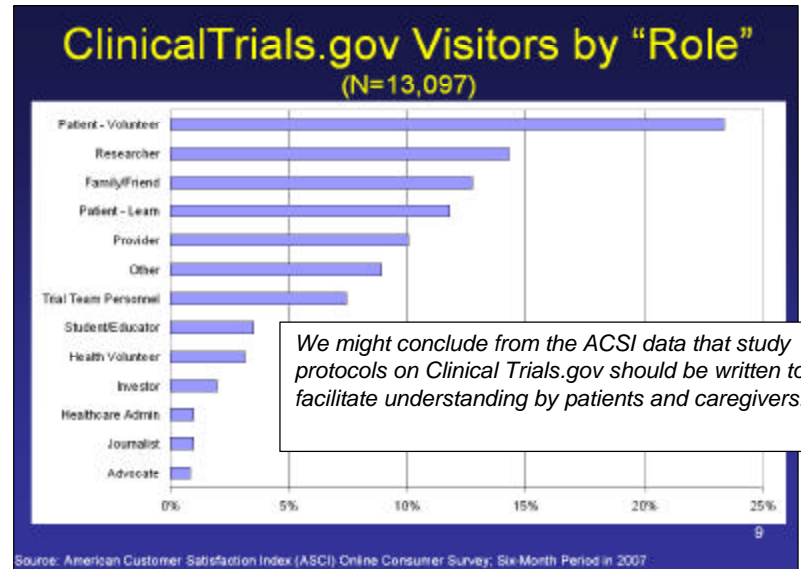
### How I have learned about clinical trials:

	Patients	%	Most Common *	% Most Common
My oncologist	74	29%	31	25%
Outside expert	39	16%	3	2%
Internet	95	38%	55	44%
Lymphomation.org	63	25%	13	10%
Drug sponsor	16	6%	0	0%
Support group	71	28%	31	25%
Other	18	7%	0	0%

Internet subgroup

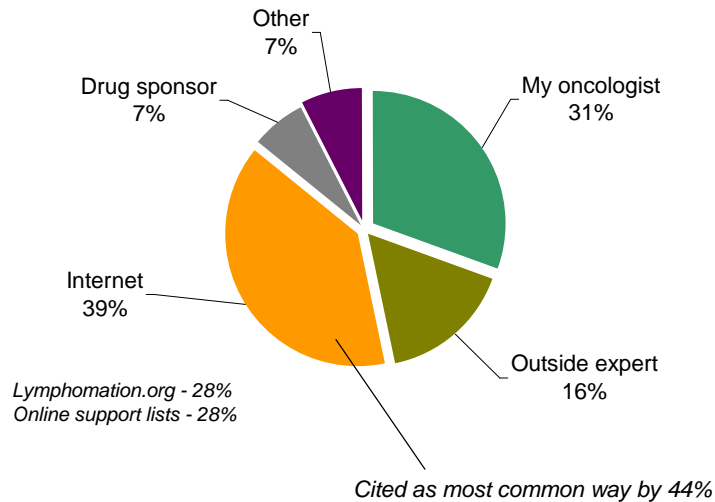
Internet subgroup

\* Most Common = The number of participants who reported that this was the most common way of learning about trials

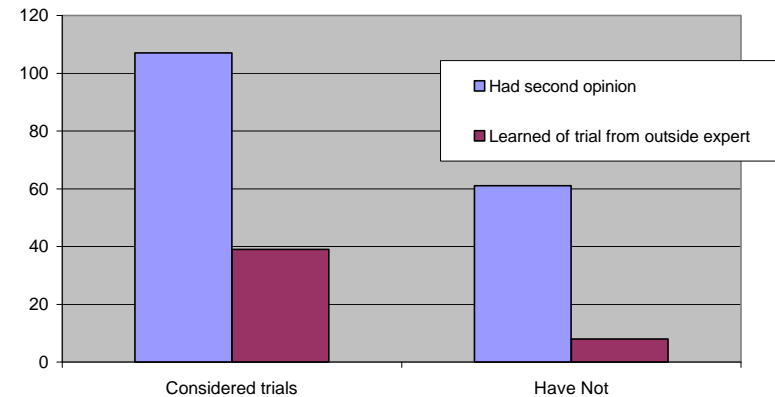


We might conclude from the ACSI data that study protocols on Clinical Trials.gov should be written to facilitate understanding by patients and caregivers.

### How I've Learned about Clinical Trials



### Second Opinion and Learning about Trials



85% of those who have considered a clinical trial have also had second opinions; 31% of these patients report learning of clinical trials from an outside expert.

49% of those who have not considered trials have had second opinions; 6% of these patients report learning of a trial from an outside expert.

## REASONS FOR DECLINING TO PARTICIPATE IN CLINICAL TRIALS

### Reasons for declining to participate in a clinical trial:

Reasons	Significant factor	Modest factor	Minimal factor	Not a factor	Not sure
Eligibility	28	27	48	16	7
Study risks	42	42	26	6	2
Standard tx better	6	21	50	6	18
Tests & procedures	12	46	12	20	2
Lodging and travel	30	23	41	28	4
Insurance	49	32	24	19	2
Randomized	<b>70</b>	36	13	6	1
Other	0	0	0	0	0

**Discussion:** At the time of this survey many patients with follicular lymphomas (this histology representing 55% of those surveyed) were considering idiotype vaccine studies and were concerned about being randomized to the placebo vaccine arm and receiving CVP induction therapy, without Rituxan. We anticipate that when there's genuine uncertainty (or belief) about which arm of a study is superior that this concern will decrease significantly.. That is, that the concern with randomization could be study-specific.

**Eligibility:** Concerns that you will not meet eligibility requirements\* for clinical trials

**Study Risks:** Concerns about risks, such as unknown toxicities of new drugs for which there is less clinical experience than for standard therapies.

**Standard tx better:** You feel that most clinical trial protocols do NOT compare favorably with regular treatment.

**Tests and Procedures:** Concerns about frequent or undesirable tests and procedures in clinical trials

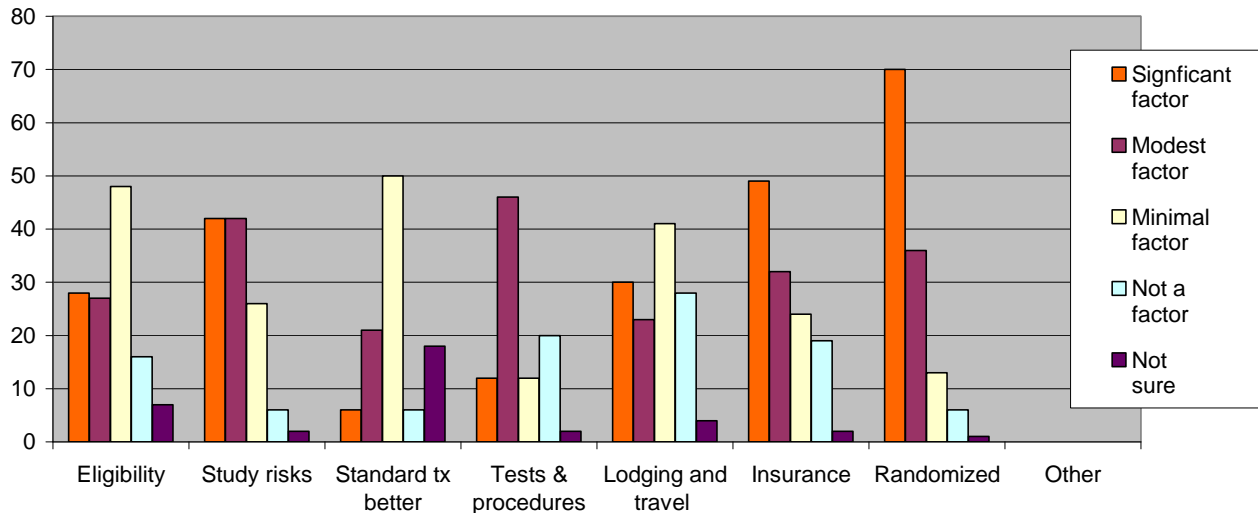
**Lodging and Travel:** Concerns about difficulties in arranging or paying for lodging or travel.

**Insurance:** Concerns that insurance may not cover related costs

**Randomized:** Concerns about randomized\* clinical trials - the chance of being in an inferior or undesirable arm of the study

\* Randomized studies typically divide participants into two treatment arms to allow for comparing the outcomes; one arm receiving the investigational agent, the other receiving the standard of care.

### Reasons for Declining to Participate in Clinical Trials



Significant factor	%
Randomized (risk of inferior arm)	56%
Insurance coverage	39%
Study risks	33%
Lodging and travel	24%
Eligibility concerns	22%
Tests & procedures	10%
Standard treatment is better	5%

**Survey question:** Please rank the significance of the factors that have influenced your willingness or ability to participate in clinical trials: Significant | Modest | Minimal | Not a Factor | Not sure

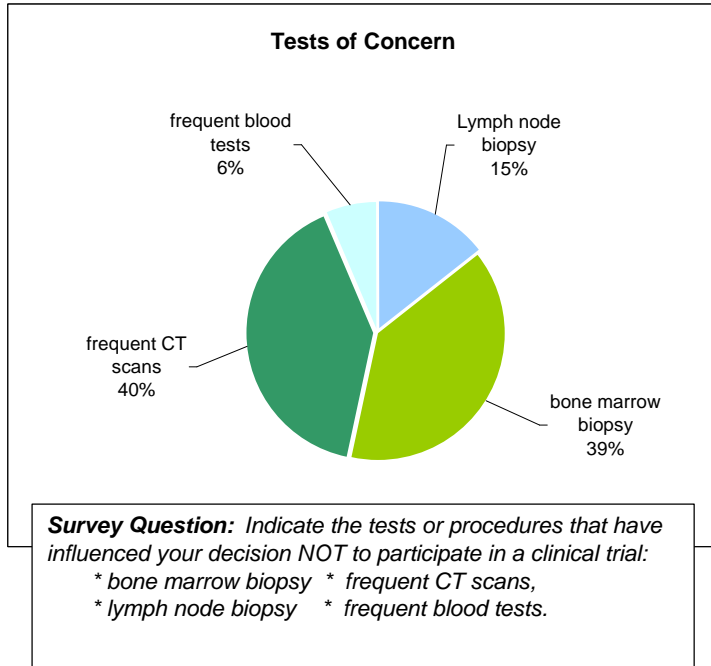
## TESTS AND PROCEDURES OF CONCERN IN CLINICAL TRIALS

### Tests and procedures of greatest concern:

*For patients who have considered a clinical trial*

Tests of concern	Patients	%	Most Common *	%
Lymph node biopsy	9	7%	13	10%
bone marrow biopsy	24	19%	59	47%
frequent CT scans	25	20%	50	40%
frequent blood tests	4	3%	4	3%

\* Most Common = The number of participants who reported that this was the most common way of learning about trials



**PATIENTS WHO HAVE NOT YET CONSIDERED CLINICAL TRIALS**

**How I have learned about clinical trials:**

For patients who have NOT yet considered a clinical trial

Learned from	Number	%	Most Common *	%
My oncologist	18	14%	3	2%
Outside expert	8	6%	1	1%
Internet	77	62%	40	32%
Lymphomation.org	53	42%	15	12%
Drug sponsor	8	6%	0	0%
Support group	73	58%	3	2%
Not sure	5	4%	1	1%
Other	0	0%	1	1%

**Survey question:** I've never seriously evaluated a clinical trial as a possible treatment for my lymphoma

	N	%		%
Oncologist is investigator	96	38%	overall	
is investigator and discussed tr	46	48%	subgroup	18%
is investigator and participate	39	41%	subgroup	16%
			overall	

**My interest level in participating in a clinical trial:**

For patients who have NOT yet considered a clinical trial

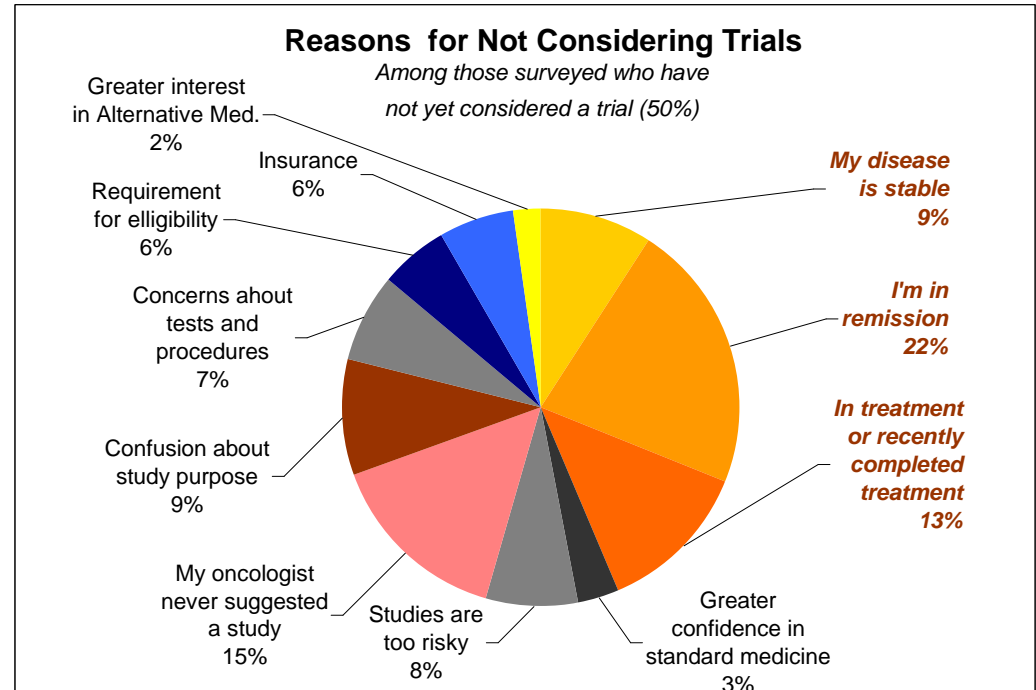
	High Interest	Some Interest	Low interest	Not sure
Number	21	52	19	29
%	17%	42%	15%	23%

**Survey question:** Expectation that clinical trials may provide access to therapies that can be superior to approved therapies and provide clinical benefit

**Reasons I have not yet considered a clinical trial:**

For patients who have NOT yet considered a clinical trial

	Number of Pts	%	Most Common *	%
My disease is stable	24	19%	21	28%
I'm in remission	58	46%	50	67%
In treatment or recently completed treatment	33	26%	12	16%
Greater confidence in standard medicine	9	7%	3	4%
Studies are too risky	20	16%	5	7%
My oncologist never suggested a study	39	31%	20	27%
Confusion about study purpose	25	20%	4	5%
Concerns about tests and procedures	19	15%	1	1%
Requirement for eligibility	15	12%	5	7%
Insurance	16	13%	3	4%
Greater interest in Alternative Med.	6	5%	1	1%



\* Most Common = The number of participants who reported that this was the most common reason for not considering a trial

## ADDITIONAL ANALYSIS

### Query: Watchful Waiting status and Clinical Trial Interest and Participation

	Considered	Not Considered	Participated in one or more clinical trials:
W&W status	21	24	5
% of all surveyed	8%	10%	2%
% of group	17%	19%	4%

### Consideration and participation in clinical trials by clinical status

Clinical Trials:	Active disease	W&W	Never Tx	Prev. Tx	Remission	Low Grade	High grade	Trans formed	In Tx	Once Tx
Considered trials	20	21	18	108	57	92	28	3	26	23
Not Considered	12	24	17	108	60	76	33	5	17	34
Participated	16	5	NA	66	32	48	16	1	19	8
% overall	50%	11%	NA	31%	27%	29%	26%	13%	44%	14%

### Consideration and participation in clinical trials by watchful waiting and treatment status

Status:	W&W & Never Tx	W&W & Prev. Tx	W&W & Once Tx
Considered trials	12	9	1
Not Considered	8	16	3
Participated	1	4	0
% overall	5%	16%	0%

**Never Tx** = I have never been treated

**Remission** = I am in remission following treatment (no detected evidence of disease)

**In Tx** = I am receiving treatment

**Prev. Tx** = *Treated one or more times*

**Once Tx** = I have had only one treatment course\* for lymphoma

**W&W** = I have detected disease but am being monitored (watchful waiting) and not treated

**Active** = I have active disease and I'm receiving treatment, or will need treatment soon

\* A treatment course could be a single agent, combination or sequential therapy. It could include maintenance therapy, such as Rituxan given after chemotherapy on a regular basis.

Clinical Trials:	Low	Modest	High	Not sure
Considered:	76	21	9	20
Not Considered:	55	22	11	37
Overall:	131	43	20	57
% overall	52%	17%	8%	23%
Participated:	38	12	4	13

### Alternative Medicine Expectation

	Low	Modest	High	Not sure
Participated	38	12	4	13