

## NOVOTTF™ THERAPY FOR RECURRENT GLIOBLASTOMA

PRiDe (Patient Registry Dataset)

### FDA Approved Indication

- NovoTTF-100A System is FDA approved for use as a treatment for adult patients (22 years of age or older) with histologically-confirmed glioblastoma multiforme (GBM), following confirmed disease recurrence after receiving chemotherapy.
- The device is intended to be used as monotherapy as an alternative to standard medical therapy for recurrent GBM after surgical and radiation options have been exhausted.
- Please refer to the Instructions For Use (IFU) for full prescribing information or visit novottftherapy.com



### PRiDe Methods

- Data from recurrent GBM patients in the United States who started NovoTTF Therapy between October 2011 and November 2013 were captured<sup>1</sup>
- Patients provided consent to use their PHI to advance the understanding of NovoTTF Therapy<sup>1</sup>
- Baseline characteristics were assessed by manual patient chart review
- OS was collected using the Social Security Death Date Registry and obituaries

GBM, glioblastoma; OS, overall survival; PHI, protected health information.

NovoTTF Therapy is approved for the treatment of recurrent glioblastoma. Refer to the IFU for full prescribing information.



## PRIDe Baseline Demographics

		PRiDe NovoTTF Therapy <sup>1,2</sup>
		(n=457)
Age (years)	Median (range)	55 (18-86)
Gender	Male	67.6%
Gender	Female	32.4%
	Median (range)	80 (10-100)
	10-60	19.0%
KPS	70-80	46.6%
	90-100	30.9%
	Unknown	3.5%
	Median (range)	2 (1-5)
	1st	33.3%
Recurrence	2nd	26.9%
	3rd-5th	27.4%
	Unknown	12.5%
	Bevacizumab	>55.1%
Prior Treatments	RT + temozolomide	>77.9%
riidi ileatiilellts	Debulking surgery	>63.9%
	Carmustine wafers	>3.7%

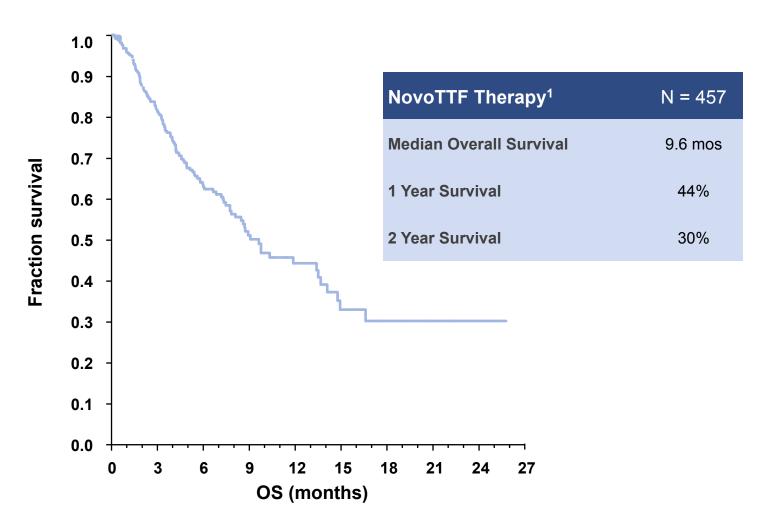
KPS, Karnofsky performance status; RT, radiotherapy.

2. Novocure data on file.



<sup>1.</sup> Wong ET, Engelhard HH, Tran DD, et al. ASCO Proceedings 2014; Publication-Only Abstract # e13033.

## PRiDe Survival Outcomes

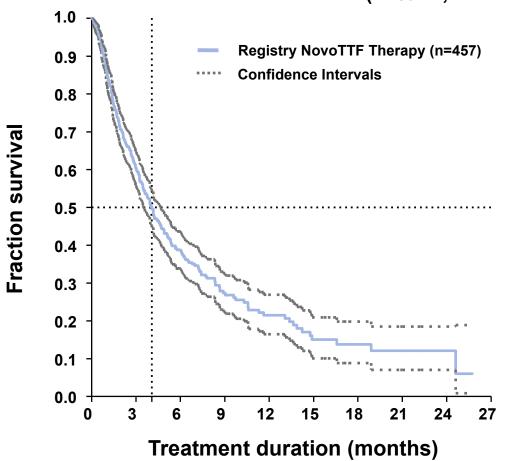


OS, overall survival.



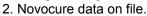
## PRiDe Treatment Duration<sup>1,2</sup>

Median treatment duration = 4.1 months (95% CI, 3.5 to 4.8)



CI, confidence interval.

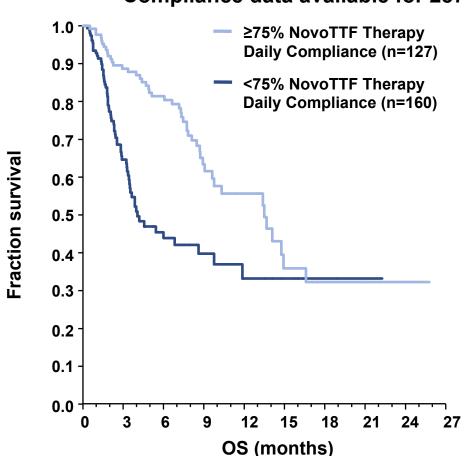
<sup>1.</sup> Wong ET, Engelhard HH, Tran DD, et al. ASCO Proceedings 2014; Publication-Only Abstract # e13033





## PRiDe Overall Survival by Compliance<sup>1</sup>

#### Compliance data available for 287 of 457 registry patients



Median OS	Months
≥75% compliance	13.5
<75% compliance	4.0

Log-rank (Mantel-Cox) Test	
Chi square	18.44
df	1
P value	<.0001

≥75% vs <75% Daily Compliance	
HR	0.43
95% CI of ratio	0.29 to 0.63

 $\hbox{CI, confidence interval; df, degrees of freedom; HR, hazard ratio; OS, overall survival.}$ 

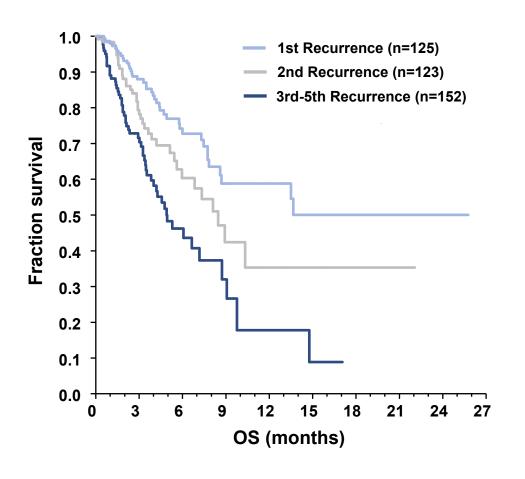
1. Novocure data on file.





# PRiDe: Overall Survival by Prognostic Factors

## PRiDe Overall Survival by Number of Recurrence<sup>1</sup>



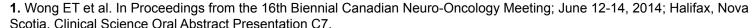
Median OS	Months
1st recurrence	20.0
2nd recurrence	8.5
3rd-5th recurrence	4.9

Log-rank (Mantel-Cox) Test	
Chi square	24.88
df	2
P value	<0.0001

1st vs 2nd Recurrence		
HR	0.6	
95% CI	0.4-0.9	
P value	0.0271	

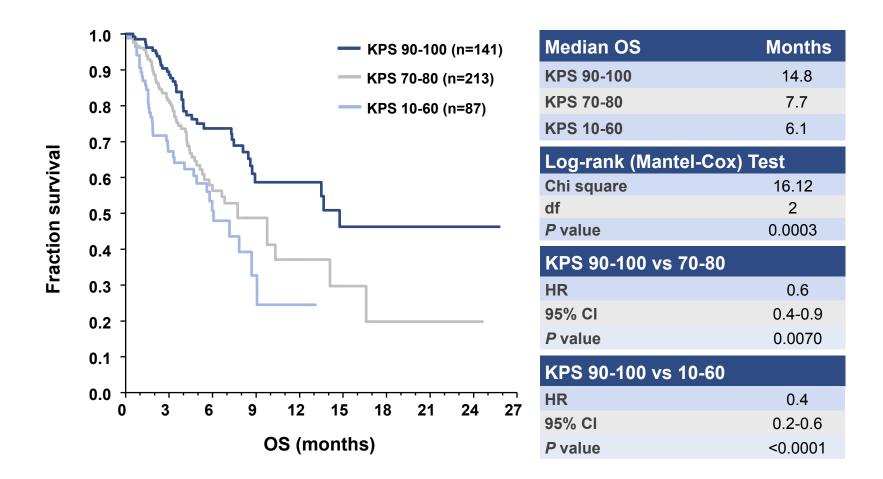
1st vs 3rd-5th Recurrence		
HR	0.3	
95% CI	0.2-0.5	
P value	<0.0001	

OS, overall survival.





## PRiDe Overall Survival by KPS<sup>1</sup>



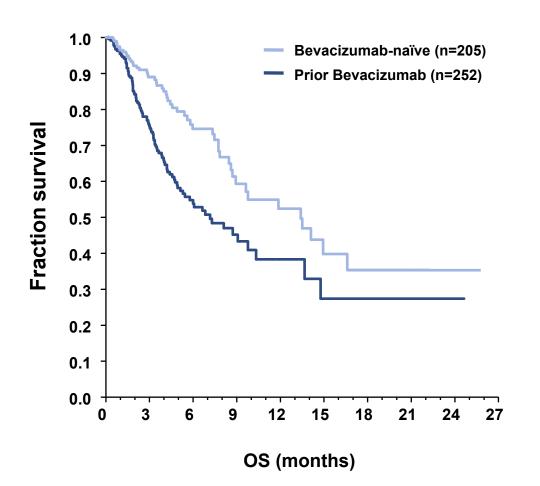
CI, confidence interval; df, degrees of freedom; KPS, Karnofsky performance status; OS, overall survival.

**1.** Wong ET et al. In Proceedings from the 16th Biennial Canadian Neuro-Oncology Meeting; June 12-14, 2014; Halifax, Nova Scotia. Clinical Science Oral Abstract Presentation C7.



### **PRiDe**

### Overall Survival by Prior Bevacizumab Treatment<sup>1</sup>

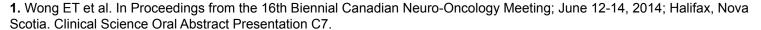


Median OS	Months
Bevacizumab-naïve	13.4
Prior bevacizumab	7.2

Log-rank (Mantel-Cox) Test	
Chi square	14.54
df	1
P value	0.0001

Bevacizumab-naïve vs Prior Bevacizumab	
HR	0.54
95% CI	0.39-0.74

CI, confidence interval; df, degrees of freedom; HR, hazard ratio; OS, overall survival.





### PRiDe Safety Analysis<sup>1</sup>

Adverse Event	Percentage of Patients (n=457)
Skin reaction	24.3
Heat sensation	11.3
Neurological disorder	10.4
Seizure	8.9
Electric sensation	7.7
Headache	5.7
Pain/discomfort	4.7
Fall	3.9
Psychiatric disorder	2.9
Gastrointestinal disorder	2.9
Fatigue	2.5
Vascular disorder	1.6
Weakness	1.4
Infections	1.4
Eye disorder	1.3



## PRiDe Conclusions

- The PRiDe dataset represents 457 patients treated in the United States between October 2011 and November 2013<sup>1</sup>
  - Novocure believes this represents about 5% of the treated recurrent GBM population in the United States<sup>2</sup>
- OS with NovoTTF Therapy is significantly longer in the real-world setting than that observed in the EF-11 pivotal trial<sup>3,4</sup>
  - Median OS: 9.6 vs 6.6 months
  - 1-Year survival: 44% vs 20%
  - 2-Year survival: 30% vs 9%
- Compliance is a clear predictor of survival on NovoTTF Therapy<sup>3,4</sup>
  - PRiDe dataset confirms that at least 18 hours of treatment per day with NovoTTF Therapy achieves longer survival outcomes
- The PRiDe dataset confirms that certain prognostic factors are predictive for survival<sup>5</sup>
  - Bevacizumab-naïve patients
  - Performance status
  - Use in 1st recurrence
- No new safety signals have been detected in the real-world setting<sup>3</sup>
- Skin irritation was the only common device-related adverse event, which is consistent with the results from the EF-11 pivotal trial<sup>3,4</sup>

GBM, glioblastoma; OS, overall survival.

1. Wong ET, Engelhard HH, Tran DD, et al. ASCO Proceedings 2014; Publication-Only Abstract # e13033. 2. Ostrom QT, Gittleman H, Farah P, et al. *Neuro Oncol*. 2013;15(suppl 2):ii1-ii56. 3. Novocure data on file. 4. Stupp R, Wong ET, Kanner AA, et al. *Eur J Cancer*. 2012;48(14): 2192-2202.5. Wong ET et al. In Proceedings from the 16th Biennial Canadian Neuro-Oncology Meeting; June 12-14, 2014; Halifax, Nova Scotia. Clinical Science Oral Abstract Presentation C7.

