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T H E R A P E U T I C S TM

Corporate Presentation

March 2019

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Forward-looking Statements

This presentation contains "forward-looking statements" as defined by the Private Securities Litigation Reform Act of 1995. We caution investors that forward-looking statements are based on management's expectations and assumptions as of the date of this presentation and involve substantial risks and uncertainties that could cause the actual outcomes to differ materially from what we currently expect. These risks and uncertainties include, but are not limited to, those associated with: expectations regarding the timing of enrollment, completion and outcome of CONTESSA, our Phase 3 study of tasetaxel in patients with locally advanced or metastatic breast cancer; expectations regarding the timing of enrollment, completion and outcome of CONTESSA 2, our Phase 2 study of tasetaxel in patients with locally advanced or metastatic breast cancer; the unpredictable relationship between preclinical study results and clinical study results; our ability to obtain regulatory approval of tasetaxel; our capital requirements; the expected length of commercial exclusivity for tasetaxel; and other risks and uncertainties identified in our filings with the United States Securities and Exchange Commission. Forward-looking statements in this presentation apply only as of the date made, and we undertake no obligation to update or revise any forward-looking statements to reflect subsequent events or circumstances.

Our Mission

Odonate Therapeutics™ is dedicated to the development of best-in-class therapeutics that improve and extend the lives of patients with cancer



Our Company

- Odonate Therapeutics is dedicated to the development of best-in-class therapeutics that improve and extend the lives of patients with cancer
- Our initial focus is on developing tasetaxel, an investigational, orally administered taxane, for the treatment of locally advanced or metastatic breast cancer (MBC)
- Tasetaxel has been generally well tolerated in clinical studies and has demonstrated single-agent antitumor activity in Phase 2 studies in patients with MBC
- We are conducting a multinational, multicenter, randomized, Phase 3 study of tasetaxel in MBC, known as CONTESSA
- Our goal for tasetaxel is to develop an effective chemotherapy choice for patients that provides quality-of-life advantages over current alternatives

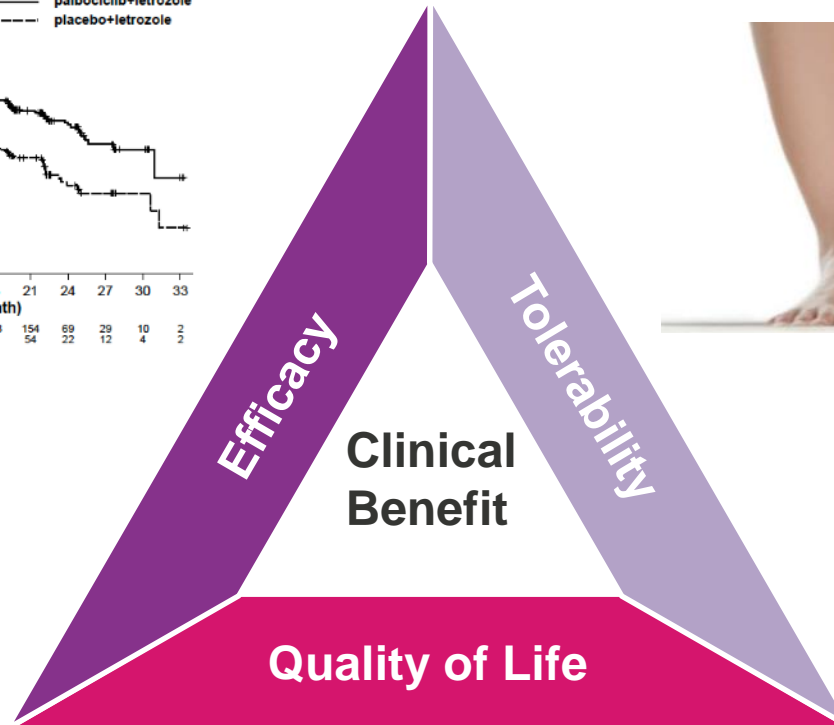
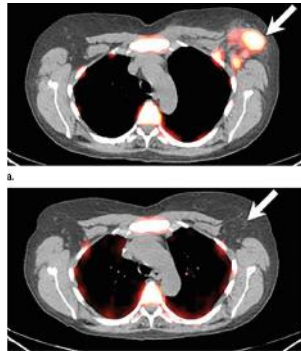
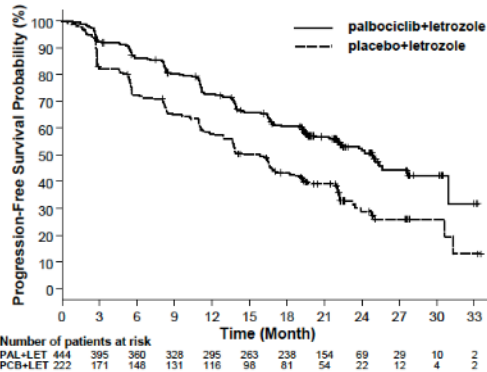
**There Remains a High Unmet Medical
Need in the Treatment of Metastatic Breast
Cancer**

Breast Cancer Incidence and Deaths Remain High



	Estimated Incidence		Estimated Deaths per Year	
	Breast Cancer	Ranking among All Cancers	Breast Cancer	Ranking among All Cancers in Women
Europe ^a	523,000	#1	138,000	#1
U.S. ^b	269,000	#1	41,000	#2
World ^a	2,089,000	#2	627,000	#1

Clinical Benefit Is a Balance of Efficacy, Tolerability and Quality of Life

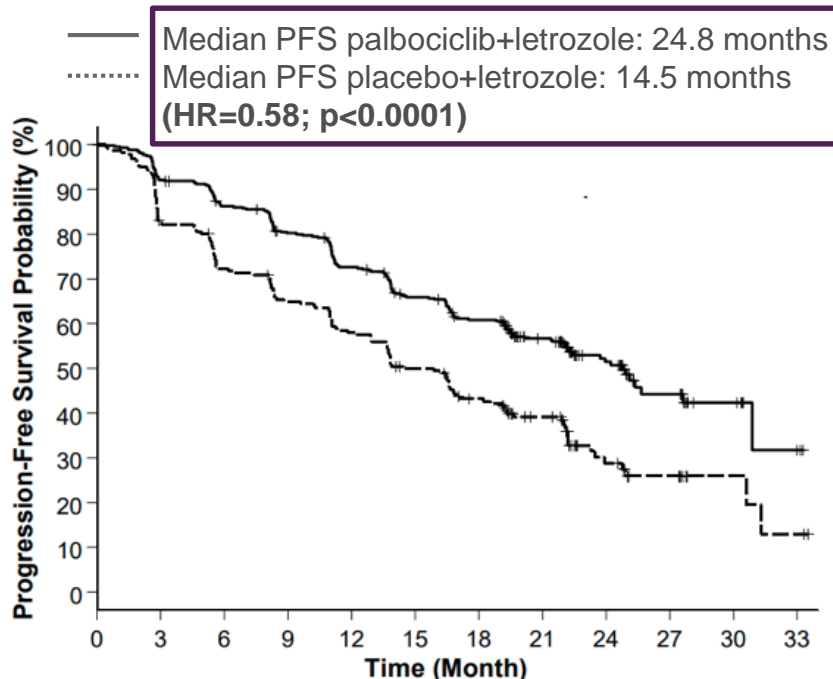


CDK 4/6 Inhibitors – A Major Advance in the Treatment of HR Positive MBC

When given together with endocrine therapy, palbociclib, an oral therapy, significantly delays the need for chemotherapy



PFS Palbociclib+letrozole vs. Placebo+letrozole in MBC^a

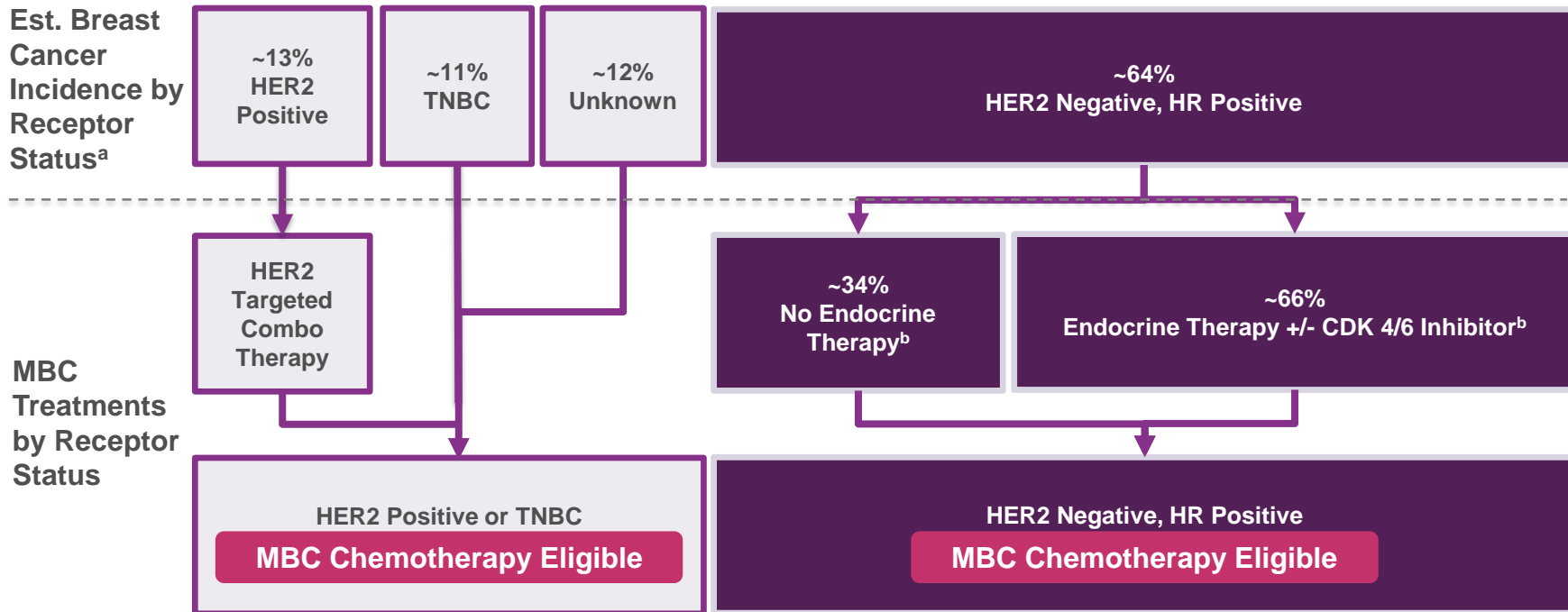


Tolerability^b

Adverse Event	Palbociclib-Letrozole (N=444)			Placebo-Letrozole (N=222) ^b		
	Any Grade	Grade 3	Grade 4 [†]	Any Grade	Grade 3	Grade 4
	<i>number of patients (percent)</i>					
Any adverse event	439 (98.9)	276 (62.2)	60 (13.5)	212 (95.5)	49 (22.1)	5 (2.3)
Neutropenia [‡]	353 (79.5)	249 (56.1)	46 (10.4)	14 (6.3)	2 (0.9)	1 (0.5)
Leukopenia [§]	173 (39.0)	107 (24.1)	3 (0.7)	5 (2.3)	0	0
Fatigue	166 (37.4)	8 (1.8)	0	61 (27.5)	1 (0.5)	0
Nausea	156 (35.1)	1 (0.2)	0	58 (26.1)	4 (1.8)	0
Arthralgia	148 (33.3)	3 (0.7)	0	75 (33.8)	1 (0.5)	0
Alopecia [¶]	146 (32.9)	0	0	35 (15.8)	0	0
Diarrhea	116 (26.1)	6 (1.4)	0	43 (19.4)	3 (1.4)	0
Cough	111 (25.0)	0	0	42 (18.9)	0	0
Anemia	107 (24.1)	23 (5.2)	1 (0.2)	20 (9.0)	4 (1.8)	0
Back pain	96 (21.6)	6 (1.4)	0	48 (21.6)	0	0
Headache	95 (21.4)	1 (0.2)	0	58 (26.1)	4 (1.8)	0
Hot flush	93 (20.9)	0	0	68 (30.6)	0	0

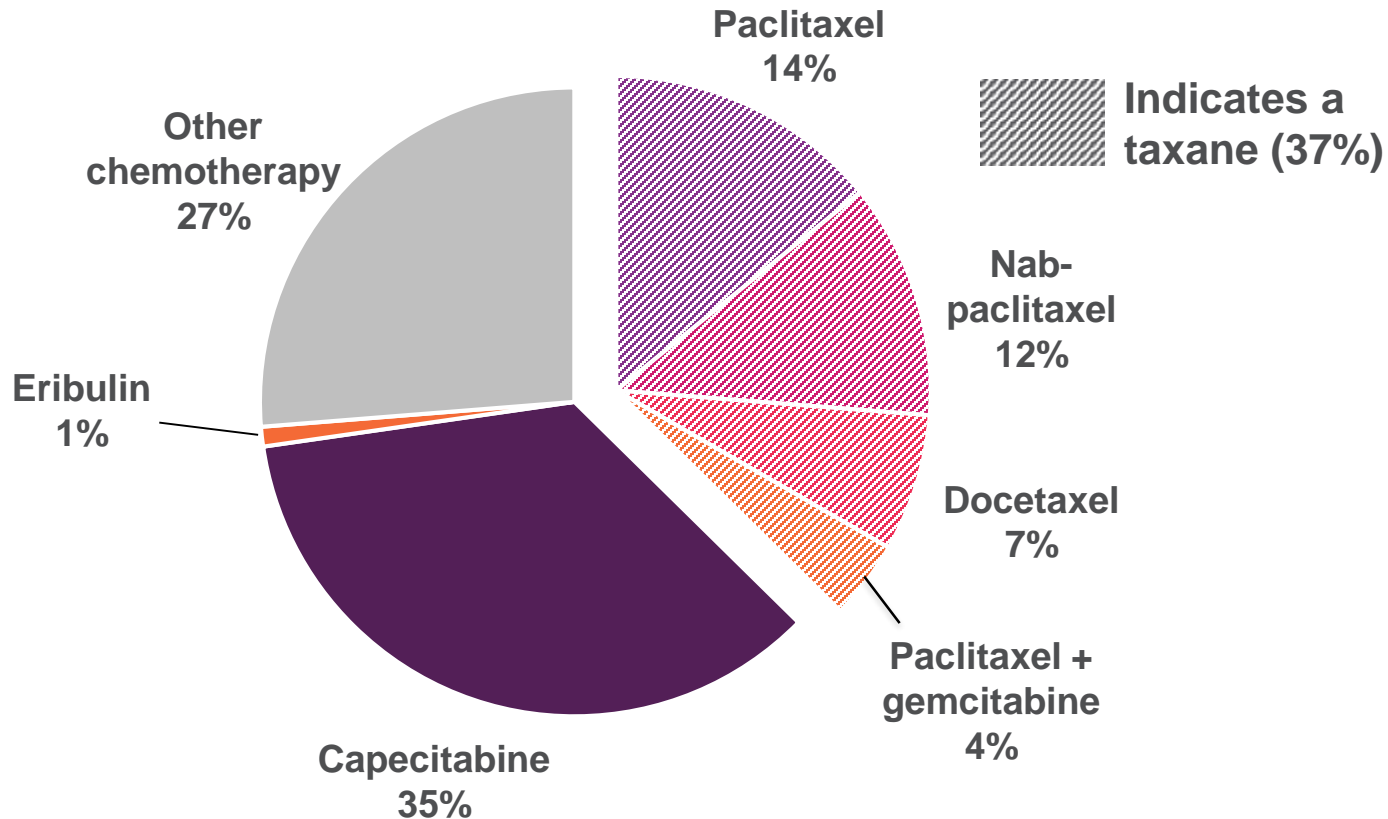
Palbociclib added little Grade 3-4 non-hematologic toxicity to letrozole

Chemotherapy Remains a Mainstay Treatment for MBC



Taxanes Are Preferred Chemotherapy Agents in MBC

Physician-reported Preferences for First-line Chemotherapy
for Patients with HER2 negative, HR positive MBC



Currently Available Taxanes (Paclitaxel, Nab-paclitaxel and Docetaxel) All Are Administered Intravenously

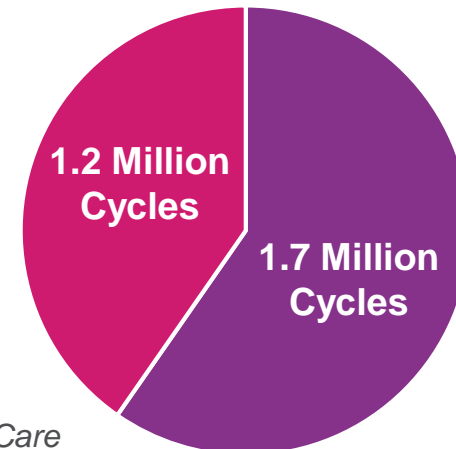


Therapies that must be given intravenously at an infusion center often are associated with^a:

- Fear of needles and complications associated with venous access
- Anxiety, including institutional-triggered side effects such as nausea and vomiting
- Heightened awareness of life-threatening disease presence
- Disruption of daily activities



>2.8 Million Cycles of Paclitaxel, Nab-paclitaxel and Docetaxel Administered in 2016 in Europe and the U.S.^b



■ Europe
■ U.S.

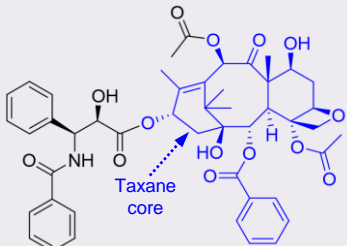
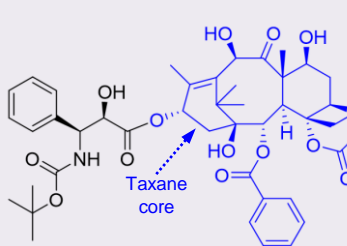
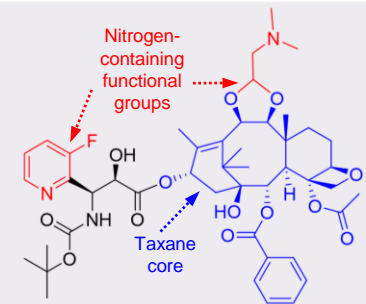
^a Gornas et al, *European Journal of Cancer Care* 2010;19(1):131-136;

Schott et al, *BMC Cancer* 2011;11:129

^b Symphony Health Solutions 2016; IMS Health 2016

Tesetaxel: An Orally Administered Taxane with Improved Pharmacologic Properties

Chemical and Pharmacologic Properties of Paclitaxel, Docetaxel and Teseaxel

Molecule	Paclitaxel	Docetaxel	Teseaxel
Structure			
Substantially effluxed by P-gp pump ^a	Yes	Yes	No
Oral bioavailability in preclinical studies	8% ^b	18% ^c	56%
Solubility (µg/mL) ^d	0.3 ^e	0.5 ^f	41,600
Terminal plasma half-life in humans (t _{1/2})	11 hours ^g	11 hours ^h	193 hours ⁱ

^a The P-glycoprotein (P-gp) efflux pump mediates gastric absorption as well as chemotherapy resistance

^b Shanmugam et al, *Drug Development and Industrial Pharmacy* 2015;41(11):1864-1876

^c McEntee et al, *Veterinary and Comparative Oncology* 2003;1(2):105-112

^d At pH conditions similar to gastric fluid

^e Montaseri, *Taxol: Solubility, Stability and Bioavailability* 1997

^f Bharate et al, *Bioorganic & Medicinal Chemistry Letters* 2015;25(7):1561-1567



^g Tan et al, *British Journal of Cancer* 2014;110(11):2647-54

^h Taxotere (docetaxel) prescribing label

ⁱ Lang et al, 2012 ASCO Annual Meeting, *Journal of Clinical Oncology* 2012;20(15 supp):2555

Tesetaxel Has Simple, Patient-friendly Dosing Regimen



		Paclitaxel ^a	Tesetaxel
Route		Intravenous	Oral
Anti-allergy Premedication		Yes ^b	No
Frequency		Once every 7 days	Once every 21 days
Dose per	Administration	80 mg/m ²	27 mg/m ²
	21 days	240 mg/m ²	27 mg/m ²
Patient Experience		A needle and a several-hour infusion center visit	2-5 pills per cycle
			



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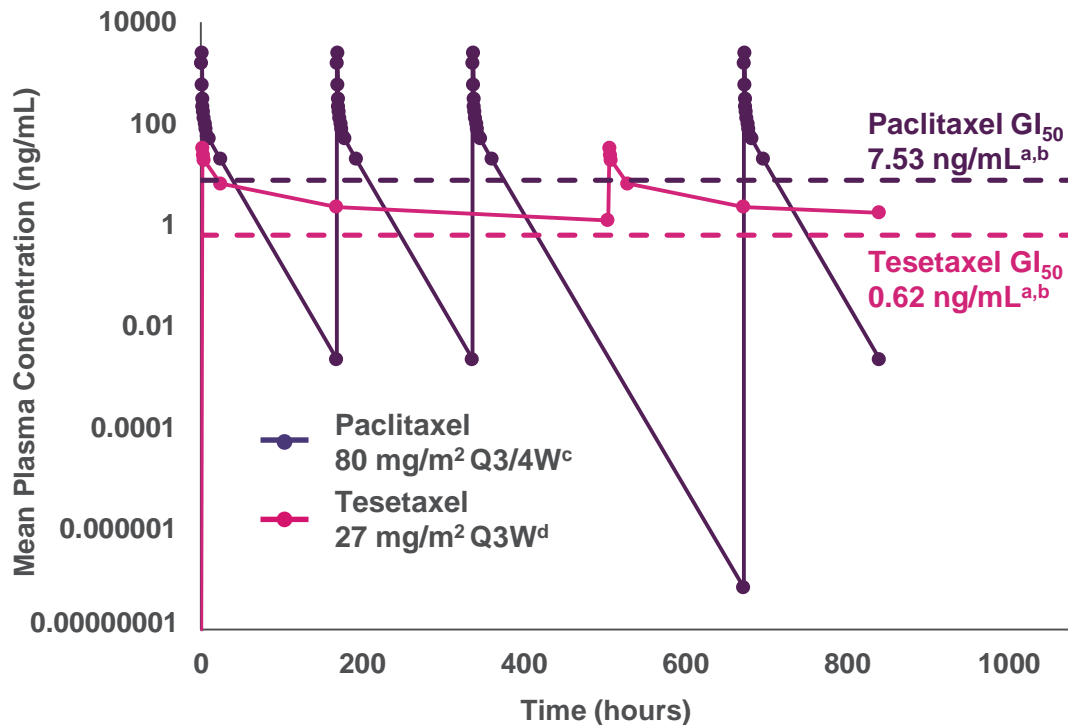
^a National Comprehensive Cancer Network (NCCN), Clinical Practice Guidelines in Oncology 2017

^b Corticosteroid plus antihistamine plus H₂ antagonist as per prescribing label



PK Profiles of Paclitaxel and Tesetaxel

Mean Plasma Concentration (ng/mL) vs. Time (hours) for Paclitaxel and Tesetaxel



Metric	Paclitaxel	Tesetaxel
Dose	80 mg/m ² Q3/4W	27 mg/m ² Q3W
C _{max} (ng/mL)	2,483 ^c	36 ^d
GI ₅₀ (ng/mL)	7.53 ^{a,b}	0.62 ^{a,b}
C _{max} /GI ₅₀	330	58
t _{1/2} (hours)	11 ^c	193 ^d
% time above GI ₅₀	18%	100%

^a Shionoya et al, *Cancer Science* 2003;94(5):459-66

^b Trock et al, *Journal of the NCI* 1997;89(13):917-31

^c Tan et al, *British Journal of Cancer* 2014;110(11):2647-54

^d Lang et al, 2012 ASCO Annual Meeting, *Journal of Clinical Oncology* 2012;20(15 sup):2555



Tesetaxel Retained Activity against Chemotherapy-resistant Tumors *In Vitro*

	GI ₅₀ ^a (ng/mL)		
	Paclitaxel	Docetaxel	Tesetaxel
P-gp ^b Negative Tumor Cell Lines (n=17)	1.8	0.8	0.5
P-gp Positive Tumor Cell Lines (n=6)	15.7	4.3	0.8



Taxanes and CNS Penetration

- Paclitaxel and docetaxel do not significantly penetrate the brain
 - Paclitaxel: 1% of plasma level^a
 - Docetaxel: 8% of plasma level^b
- P-gp is a central element of the blood-brain barrier
- Unlike paclitaxel and docetaxel, tesetaxel is substantially not effluxed by P-gp



Odonate Therapeutics Announces Presentation at the American Association for Cancer Research (AACR) Annual Meeting 2019

- In Preclinical Testing, Tesetaxel Brain Concentrations Exceeded Concentrations Required for Tumor Killing for Sustained Period of Time -

	N	Radioactivity ^a Concentration 14 Days after Dosing (ng eq./g or mL)			Tumor GI ₅₀ ^b (ng/mL)	Cerebrum Concentration/ Tumor GI ₅₀
		Cerebrum (Mean ± SD)	Plasma (Mean ± SD)	Cerebrum/ Plasma		
Dog ^c	3	10.9 ± 4.0	0.9 ± 0.1	12x	0.6	18x
Monkey ^d	3	6.5 ± 3.8	0.9 ± 0.2	7x	0.6	11x

^a Tesetaxel labeled with ¹⁴C

^b Concentration of drug required to inhibit growth by 50% across 23 tumor cell lines

^c Single dose of 0.6 mg/kg (equivalent to 44% of a human dose of 27 mg/m²)

^d Single dose of 1 mg/kg (equivalent to 44% of a human dose of 27 mg/m²)

CNS Metastases Are Common and Associated with Poor Outcomes



Cancer Type	Patients (%) Who Develop CNS Mets	Median Survival with or without CNS Mets	Median Survival with CNS Mets
Metastatic Breast Cancer			
HER2 Negative, HR Positive	10% ^a	25 months ^b	10 months ^a
HER2 Positive	30-55% ^a	37 months ^c	20 months ^a
Triple Negative	25-46% ^a	13 months ^d	6 months ^a
Lung Cancer			
Advanced Non-Small Cell Lung Cancer	40% ^e	8-10 months ^e	4-5 months ^e

^a Phillips et al, *The Breast* 2017;31:90-98

^b Bergh et al, *Journal of Clinical Oncology* 2012;30(9):921-9

^c Urruticoechea et al, *Journal of Clinical Oncology* 2018;36,no.15_suppl:1013-1013

^d Kassam et al, *Clinical Breast Cancer* 2009;9:29-33

^e Ali et al, *Current Oncology* 2013;Aug;20(4):e300–e306



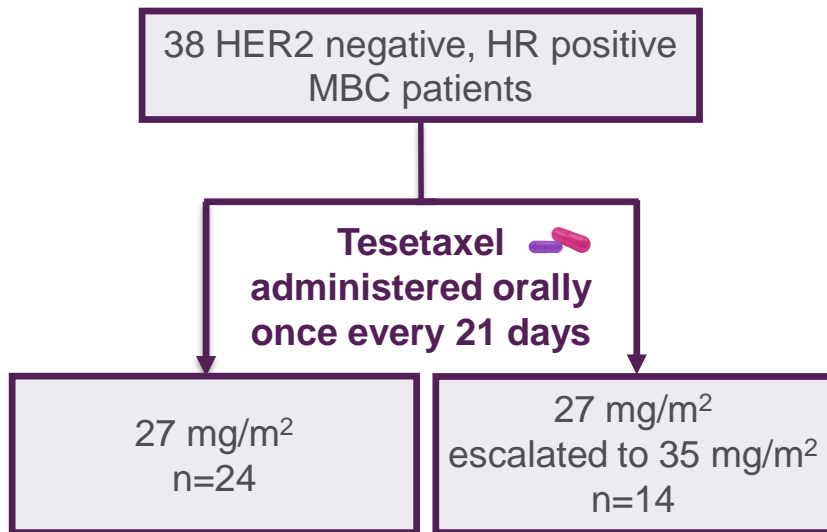
Activity of Tese taxel, an Oral Taxane, Given as a Single-agent in Patients with HER2-, Hormone Receptor + (HR+) Metastatic Breast Cancer (MBC) in a Phase 2 Study

Andrew Seidman¹, Lee Schwartzberg², Vinay Gudena³, Peter Rubin⁴, Stew Kroll⁵, Joseph O'Connell⁵, Kevin Tang⁵, Joyce O'Shaughnessy⁶

¹Memorial Sloan Kettering Cancer Center, New York, NY; ²West Cancer Center, Memphis, TN; ³Cone Health Cancer Center, Greensboro, NC; ⁴SMHC Cancer Care and Blood Disorders, Biddeford, ME; ⁵Odonate Therapeutics, Inc., San Diego, CA; ⁶Texas Oncology-Baylor Charles A. Sammons Cancer Center, US Oncology, Dallas, TX

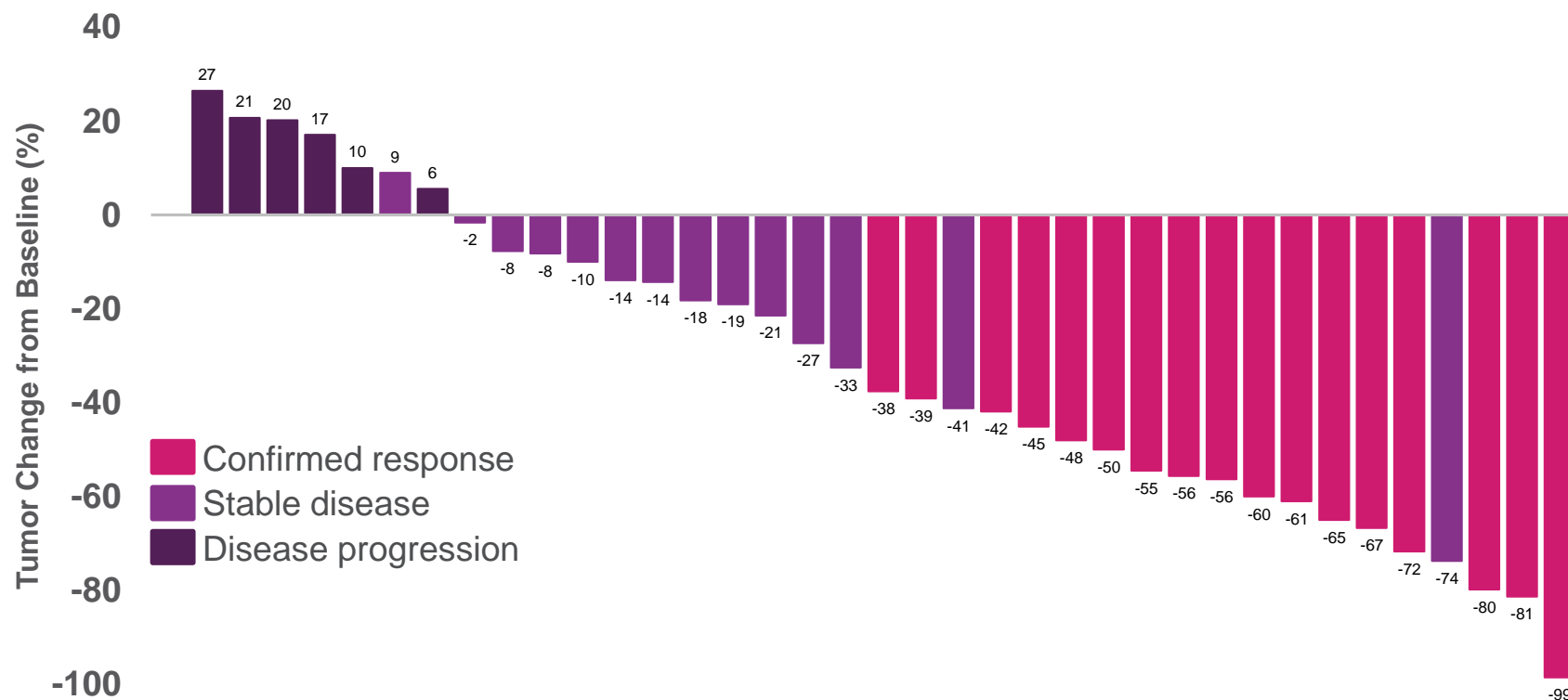


Exposure and Patient Characteristics



Patient Characteristics	n=38
Median age, years (minimum, maximum)	58 (36, 80)
Median time from initial diagnosis, years (minimum, maximum)	2 (0, 12)
ECOG status, n (%)	
0 / 1	20 (53) / 18 (47)
Prior therapy, n (%)	
Endocrine therapy	28 (74)
Neoadjuvant/adjuvant chemotherapy	26 (68)
Taxane-containing regimen	20 (53)
Anthracycline-containing regimen	19 (50)
Prior radiotherapy, n (%)	
No / Yes	11 (29) / 27 (71)
Visceral disease, n (%)	
No / Yes	5 (13) / 33 (87)
Common sites of disease, n (%)	
Liver	19 (50)
Lung	18 (47)
Bone	19 (50)
Lymph node	16 (42)

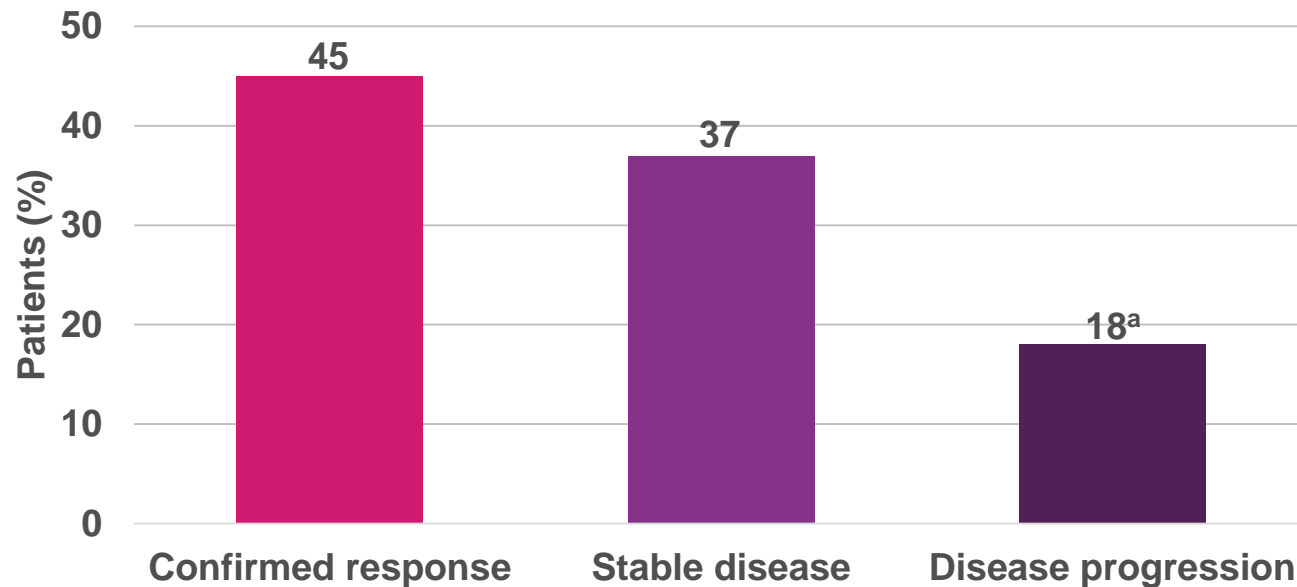
Tumor Change from Baseline in Target Lesions^a





Response

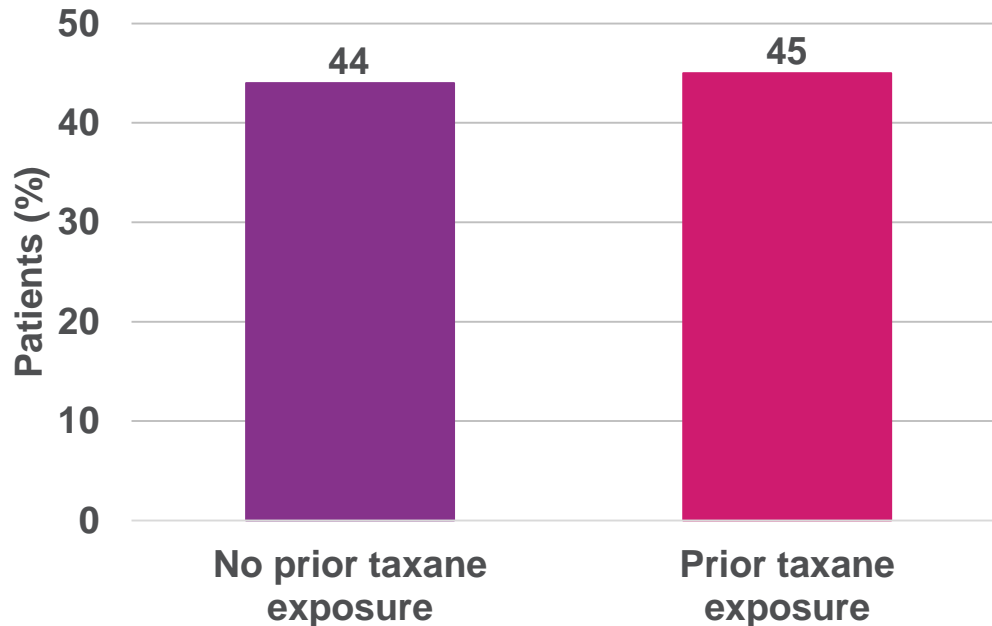
- All 38 enrolled patients are included in the efficacy analysis
- 45% (95% CI: 29%-62%) of patients achieved a confirmed response
- Median duration of response was 10.9 months (95% CI: 4.3-13.6 months)
- Median PFS was 5.4 months (95% CI: 3.8-9.8 months)





Response by Prior Taxane Exposure

44% (95% CI: 22%-69%) of patients with no prior taxane exposure achieved a confirmed response, compared to 45% (95% CI: 23%-68%) of patients with prior taxane exposure



Grade ≥ 3 Adverse Events Regardless of Relationship



- There were no adverse events leading to death
- There were no hypersensitivity reactions
- The incidence of Grade 2 alopecia was 18%

Adverse Events in 2 or More Patients	27 mg/m ² (n=24) n (%)		27 mg/m ² Escalated to 35 mg/m ² (n=14) n (%)	
	Grade 3	Grade 4	Grade 3	Grade 4
Neutropenia	3 (13)	3 (13)	0 (0)	6 (43)
Febrile neutropenia	1 (4)	0 (0)	0 (0)	1 (7)
Thrombocytopenia	2 (8)	0 (0)	0 (0)	0 (0)
Neuropathy	1 (4)	0 (0)	4 (29)	0 (0)
Fatigue	2 (8)	0 (0)	2 (14)	0 (0)
Pain in extremity	1 (4)	0 (0)	2 (14)	0 (0)
ALT increased	1 (4)	0 (0)	1 (7)	0 (0)
Diarrhea	0 (0)	1 (4)	1 (7)	0 (0)
Muscle weakness	1 (4)	0 (0)	1 (7)	0 (0)
Pyrexia	1 (4)	0 (0)	1 (7)	0 (0)
Sepsis	1 (4)	0 (0)	1 (7)	0 (0)
Vomiting	1 (4)	0 (0)	1 (7)	0 (0)
Hypokalemia	0 (0)	0 (0)	2 (14)	0 (0)
AST increased	2 (8)	0 (0)	0 (0)	0 (0)
Decreased appetite	2 (8)	0 (0)	0 (0)	0 (0)
Dehydration	2 (8)	0 (0)	0 (0)	0 (0)
Renal failure acute	2 (8)	0 (0)	0 (0)	0 (0)



**A Multinational, Multicenter, Randomized,
Phase 3 Study of Tese-taxel in MBC**

Registration Studies of Chemotherapy Agents FDA-Approved for Advanced Breast Cancer



Drug	Sponsor	Treatment Arms	N	Primary Endpoint	Hazard Ratio	Difference at Median (Months)	P-Value
Capecitabine	Roche	Capecitabine + docetaxel vs. docetaxel	511	PFS ^a	0.64	1.9	0.0001
Gemcitabine	Lilly	Gemcitabine + paclitaxel vs. paclitaxel	529	TTP ^b	0.65	2.3	<0.0001
Ixabepilone	Bristol-Myers	Ixabepilone + capecitabine vs. capecitabine	752	PFS ^a	0.69	1.6	<0.0001

^a Progression-free survival, or time from randomization until objective tumor progression or death, whichever occurs first

^b Time to progression, or time from randomization until objective tumor progression

Source: U.S. Prescribing Information for each drug



CONTESSA Hypothesis and Objective

Hypothesis

The all-oral regimen of tasetaxel plus a *reduced dose* of capecitabine will lengthen PFS while being well-tolerated as compared to capecitabine alone

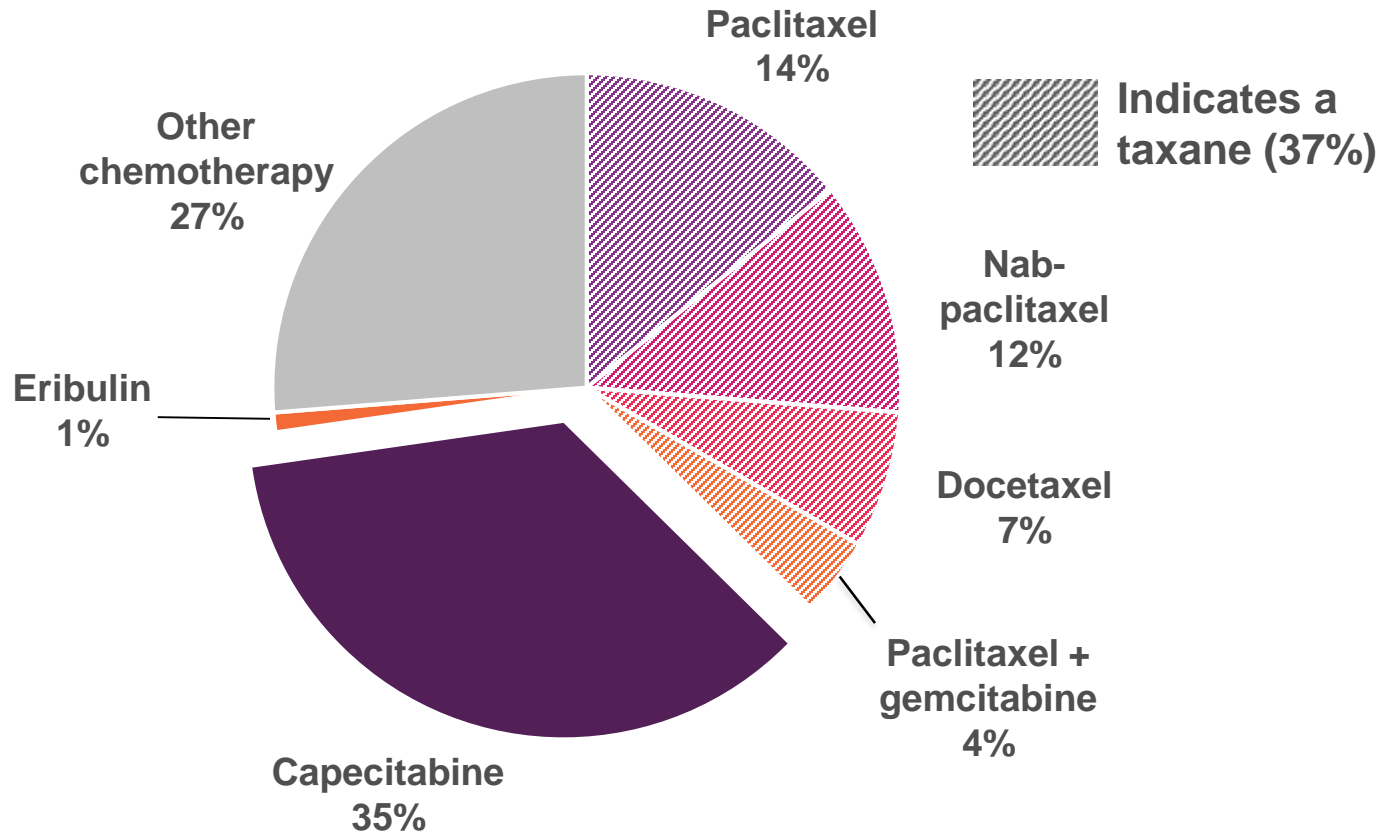


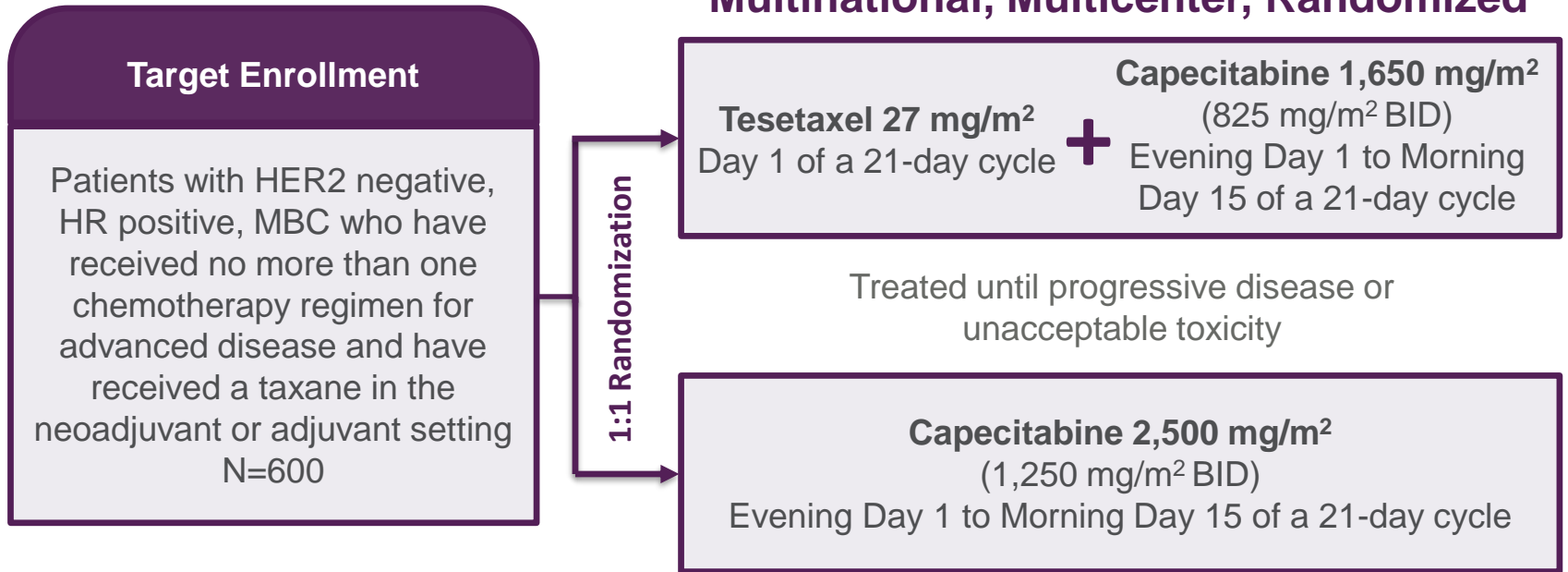
Objective

Establish a new, all-oral treatment option with an improved benefit-risk profile

Capecitabine, An Oral Chemotherapy, Is Widely Used in MBC

Physician-reported Preferences for First-line Chemotherapy for Patients with HER2 negative, HR positive MBC





Primary Endpoint: PFS assessed by Independent Radiologic Review Committee (IRC)

Secondary Endpoints: Overall survival (OS), ORR assessed by IRC and disease control rate assessed by IRC



Support for Combining Capecitabine at 1,650 mg/m²/day^a with a Taxane

18 first-line chemotherapy MBC studies of taxane plus capecitabine combinations

- No apparent dose response from 1,650 to 2,000 mg/m²/day^a
- 1,650 mg/m²/day^a most studied dose <2,000 mg/m²/day^a

Taxane+Capecitabine Studies Conducted at a Capecitabine Dose of:	# of Studies	# of Patients	ORR	PFS (months)	OS (months)
1,900-2,000 mg/m ² /day ^{a,b}	10	498	53%	10.5	27.4
1,800 mg/m ² /day ^{a,c}	2	195	55%	10.4	25.9
1,650 mg/m ² /day ^{a,d}	5	436	64%	11.8	27.2
1,500 mg/m ² /day ^{a,e}	1	37	50%	NA	NA

^a Days 1-14 of a 21-day cycle

^b Bachelot et al, *Oncology* 2011;80(3-4):262-268; Campone et al, *The Breast Journal* 2013;19(3):240-249; Chitapanarux et al, *Asia-Pacific Journal of Clinical Oncology* 2012;8:76-82; Fan et al, *Annals of Oncology* 2013;24:1219-1225; Liao et al, *Chemotherapy* 2013;59:207-213; Michalaki et al, *Anti-Cancer Drugs* 2009;20(3):204-207; Michalaki et al, *Anticancer Research* 2010;30:3051-3054; Venturini et al, *Cancer* 2003;97(5):1174-1180; Wang et al, *Cancer* 2015;121:3412; Wardley et al, *Journal of Clinical Oncology* 2010;28(6):976-983

^c Bisagni et al, *Cancer Chemotherapy and Pharmacology* 2013;71(4):1051-1057; Luck et al, *Breast Cancer Research and Treatment* 2015;149:141-149

^d Hatschek et al, *Breast Cancer Research and Treatment* 2012;131(3):939-947; Lam et al, *European Journal of Cancer* 2014;50(18):3077-3088; Perez et al, *Annals of Oncology* 2010;21(2):269-274; Schwartzberg et al, *Clinical Breast Cancer* 2012;12(2):87-93; Tonyali et al, *Journal of Cancer Research and Clinical Oncology* 2013;139(6):981-986

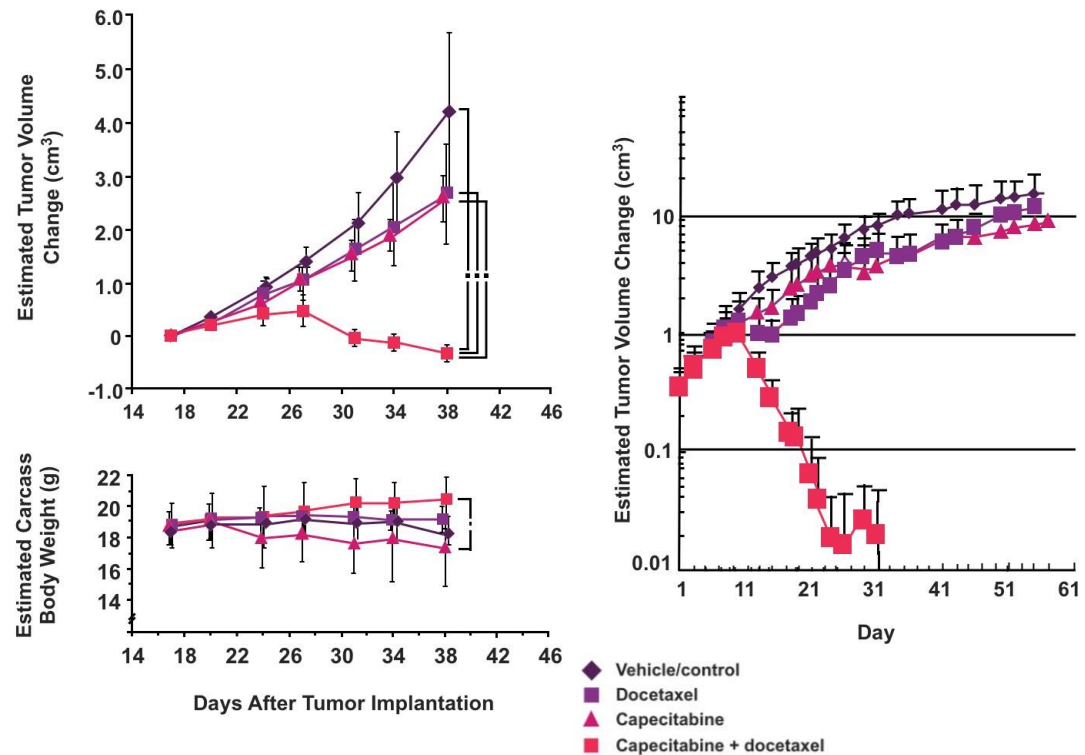
^e Silva et al, *Clinical Breast Cancer* 2008;8(2):162-167

Preclinical Evidence of Synergy when Combining a Taxane with Capecitabine

- Taxanes up-regulate tumor levels of thymidine phosphorylase, the enzyme essential for the activation of capecitabine^{a,b}
- Synergy may be tumor-specific, as toxicity as measured by weight loss and effect on peripheral blood cells was minimal^b

Capecitabine at 1/2 MTD + Docetaxel at 1/8 MTD^{a,c}

Capecitabine at 2/3 MTD + Docetaxel at 1/15 MTD^{b,d}



^a Sawada et al, *Clinical Cancer Research* 1998;4:1013-1019

^b Fujimoto-Ouchi et al, *Clinical Cancer Research* 2001;7(4):1079-1086

^c Capecitabine dosed 5 times every 7 days; docetaxel dosed once every 7 days

^d Capecitabine dosed on Days 1-14 and 22-36; docetaxel dosed on Days 8 and 29



CONTESSA Hypothesis and Objective



Hypothesis

The all-oral regimen of tasetaxel plus a *reduced dose* of capecitabine will lengthen PFS while being well-tolerated as compared to capecitabine alone



Objective

Establish a new, all-oral treatment option with an improved benefit-risk profile

Tesetaxel License, Exclusivity and Financial Position

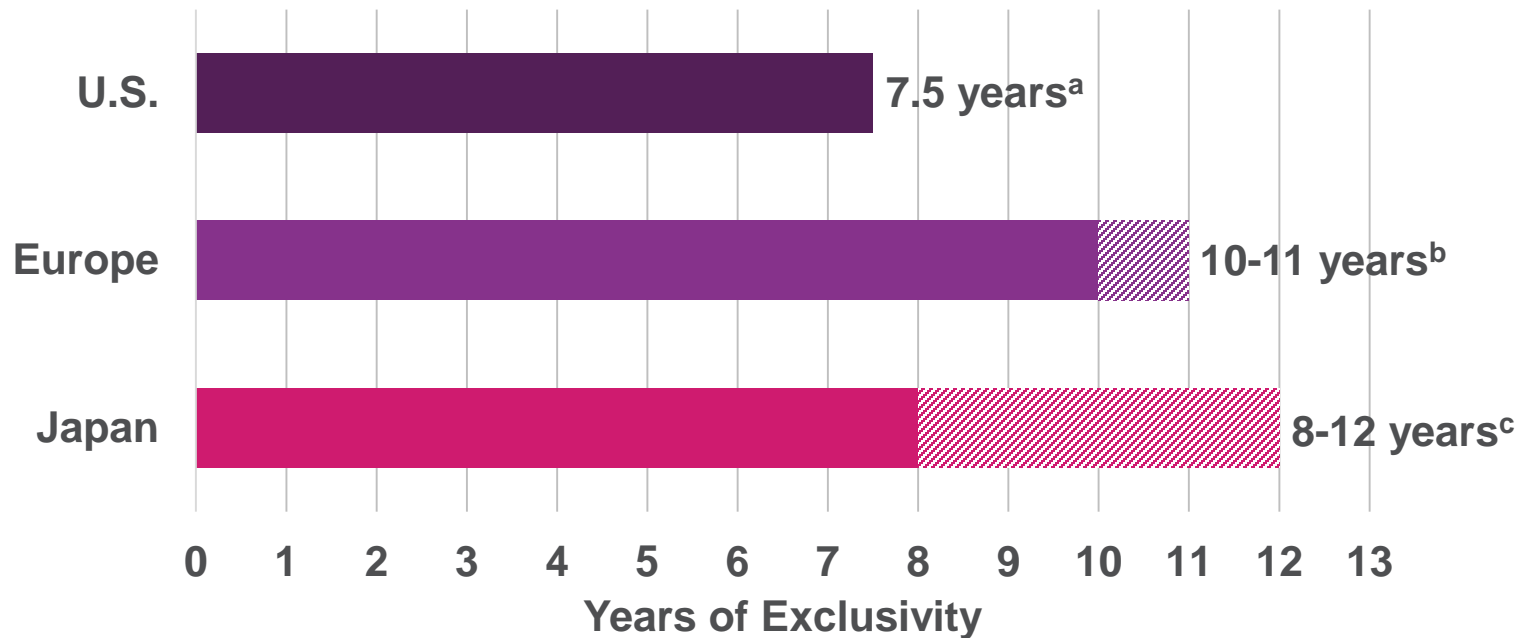


Tesetaxel License and Intellectual Property

- Odonate licensed rights to tesetaxel in all major markets from Daiichi Sankyo in 2013
 - Aggregate future milestone payments of up to \$31 million, contingent on attainment of certain regulatory milestones
 - Tiered royalty that ranges from the low to high single digits, depending on annual net sales
- Intellectual property includes: 9 U.S., 4 European and 7 Japanese patents, as well as two pending U.S. patent applications and one pending European patent application
 - Issued U.S. patent covering crystal form to provide exclusivity until 2031, assuming 5 years of Hatch-Waxman patent term restoration



NCE Regulatory Exclusivity



“...if an action for patent infringement is commenced during the one-year period beginning forty-eight months after the date of the approval of the subsection (b) application, the thirty-month period referred to in subparagraph (C) shall be extended by such amount of time (if any) which is required for seven and one-half years to have elapsed from the date of approval of the subsection (b) application.”^a

^a Title 21 United States Code Ch. 9: Federal Food, Drug, and Cosmetic Act

^b Regulation (EC) No. 726/2004 of the European Parliament and of the Council, Article 14(11)

^c Pharmaceutical Administration and Regulations in Japan Ch. 4: Post-Marketing Surveillance of Drugs



Financial Position

	As of	
	Dec. 31, 2018	Dec. 31, 2017
	(in millions)	
Cash.....	\$139.1	\$198.1
Total Assets.....	\$142.7	\$203.5
Liabilities.....	\$18.7	\$7.5
Debt.....	-	-
Total Stockholders' Equity.....	\$124.0	\$196.0



Odonate Summary

- Odonate Therapeutics is dedicated to the development of best-in-class therapeutics that improve and extend the lives of patients with cancer
- Our initial focus is on developing tesetaxel, an investigational, orally administered taxane, for the treatment of MBC
- Tesetaxel has been generally well tolerated in clinical studies and has demonstrated single-agent antitumor activity in Phase 2 studies in patients with MBC
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