Oncology Development: Maximizing the pipeline to deliver innovative treatments

Alessandro Riva, MD
EVP and Global Head Development, Oncology

Novartis R&D Investor Day
Boston, November 8, 2012

NOVARTIS
ONCOLOGY

Disclaimer

The following presentation contains forward-looking statements that can be identified by terminology such as “future growth prospects,” “pipeline,” “expects,” “expected,” “planned,” “potential,” “aims,” “will,” “plans,” “recommendations,” “projected,” “promising,” “anticipates,” “could,” “goal,” “can,” or similar expressions, or by express or implied discussions regarding potential new products, potential new indications for existing products, or regarding potential future revenues from any such products; or regarding potential future sales or earnings of the Novartis Group or any of its divisions; or by discussions of strategy, plans, expectations or intentions. You should not place undue reliance on these statements. Such forward-looking statements reflect the current views of the Group regarding future events, and involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that any new products will be approved for sale in any market, or that any new indications will be approved for any existing products in any market, or that any approvals which are obtained will be obtained at any particular time, or that any such existing or potential new products will achieve any particular revenue levels, or at any particular time. Nor can there be any guarantee that the Group, or any of its divisions, will achieve any particular financial results. In particular, management's expectations could be affected by, among other things, the inherent difficulties and uncertainties involved in making predictions about events expected to take place in the medium- to long-term future; unexpected clinical trial results, including additional analyses of existing clinical data or unexpected new clinical data; unexpected regulatory actions or delays or government regulation generally; government, industry, and general public pricing pressures; uncertainties regarding future demand for our products; uncertainties involved in the development of new healthcare products; competition in general; the Group's ability to obtain or maintain patent or other proprietary intellectual property protection, including the ultimate extent of the impact on the Group of the loss of patent protection on key products which commenced last year and will continue this year; uncertainties regarding actual or potential legal proceedings, including, among others, actual or potential product liability litigation, litigation and investigations regarding sales and marketing practices, shareholder litigation, government investigations and intellectual property disputes; unexpected product manufacturing and quality issues, including the potential outcomes of the Warning Letter issued to us with respect to three Sandoz manufacturing facilities, and the potential outcome of efforts to restart production of products formerly produced at the Consumer Health manufacturing facility at Lincoln, Nebraska; uncertainties regarding the effects of the ongoing global financial and economic crisis, including the financial troubles in certain Eurozone countries; uncertainties regarding future global exchange rates; the impact that the foregoing factors could have on the values attributed to the Group's assets and liabilities as recorded in the Group's consolidated balance sheet; and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated or expected. Novartis is providing the information in this presentation as of this date and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.

The following presentation includes discussions of investigational products and investigational indications for existing products. The efficacy and safety of such products and indications have not been established.

Focus for today

- Overview of the strong oncology development performance in 2012
- Update on selected priority compounds in full development
- Overview on newsflow projected through 2017

Novartis Oncology Global Development:

Strong performance in 2012, anticipated to continue in coming years

- Oncology Development has industry-leading capabilities which culminated in **6 indications with regulatory approvals** in 2012, including **2 new chemical entities**
- Late stage pipeline is full with **14 targeted agents**, and majority of the programs having companion diagnostics
- Dense newsflow projected through 2017
  - **13 pivotal study readouts** planned in 2013-14
  - NDA[1]s and regulatory approvals expected to continue at a steady pace

[1] *New drug application*

NOVARTIS ONCOLOGY

Six indications with regulatory approval in 2012

2 NCEs and 4 label extensions

AFINITOR® (everolimus) tablets — HR+/HER2- advanced Breast Cancer[1]	US & EU approval
AFINITOR® (everolimus) tablets / VOTUBIA® (everolimus) tablets — TSC[2], Angiomyolipomas	US & EU approval
★ JAKAVI™[3] ruxolitinib — Myelofibrosis	EU approval
★ Signifor® pasireotide — Cushing's Disease	EU approval US on-track for Q4, 2012
gleevec® (imatinib mesylate) tablets — 3 Year Adjuvant in GIST[4]	US & EU approval
Tasigna® (nilotinib) — De novo CML[5] 36 month update	EU approval US on-track for Q4, 2012

[1] *In combination with exemestane after progressing on an aromatase inhibitor*
[2] *Tuberous sclerosis complex*
[3] *Novartis licensed INC424/Jakavi® from Incyte for development and commercialization outside the US. Incyte has retained the rights in the US*
[4] *Gastro-intestinal stromal tumors*
[5] *Chronic myeloid leukemia*

★ NCE: new chemical entity

NOVARTIS ONCOLOGY

Broad & deep Development portfolio

Solid Tumor	
AFINITOR (everolimus) Tablets *(mTOR inhibitor)*	RCC[1]; pNET[2]; TSC[3]; HR+ BC[4, 5] HER2+ BC[5] 1st & 2nd/3rd line; HCC[6]; Non-functioning Carcinoid
Signifor pasireotide *(multi-receptor targeted somatostatin analogue)*	Cushing's Disease; Acromegaly Carcinoid
BKM120/BEZ235 *(PI3K inhibitors)*	NSCLC[7]; Prostate; Glioblastoma multiforme; Breast
TKI258 *(FGFR & VEGFR inhibitor)*	RCC[1]; Breast; Endometrial; HCC[6]
LDK378 *(ALK inhibitor)*	NSCLC[7]
LDE225 *(Smoothened inhibitor)*	Basal cell carcinoma; medulloblastoma
MEK162[9] *(MEK inhibitor)*	NRAS-mutated Melanoma
LGX818 *(BRAF inhibitor)*	BRAF-mutated Melanoma
AUY922[10] *(HSP90 inhibitor)*	ALK+ & EGFR-mutated NSCLC[7]

Hematological Malignancies	
Tasigna (nilotinib) *(2nd generation potent BCR-ABL inhibitor)*	CML[8] – de novo; CML[8] Treatment Free Remission; c-KIT Melanoma
JAKAVI ruxolitinib *(JAK1/JAK2 inhibitor)*	Myelofibrosis; Polycythemia Vera
EXJADE deferasirox *(Iron Chelator)*	Non-Transfusion-Dependent Thalassemia
AFINITOR (everolimus) Tablets *(mTOR inhibitor)*	Lymphoma
LBH589 *(Pan HDAC inhibitor)*	Multiple Myeloma
PKC412 *(FLT3; C-KIT; PDGFR inhibitor)*	Acute Myeloid Leukemia Aggressive Systemic Mastocytosis)
CTL019[11] *(CD19-targeted chimeric antigen receptor (CAR) immunotherapy)*	Chronic lymphocytic leukemia; acute lymphocytic leukemia; other B-cell malignancies

[1] Renal cell carcinoma; [2] Pancreatic neuroendocrine tumors; [3] Tuberous sclerosis complex incl SEGA, AML, seizures; [4] Advanced hormone-receptor positive; [5] Breast cancer; [6] Hepatocellular carcinoma; [7] Non-small cell lung cancer; [8] Chronic myeloid leukemia; [9] MEK162 in-licensed from Array BioPharma; [10] Discovered under collaboration with Vernalis plc; [11] In-licensed from Univ. of Penn.

NOVARTIS ONCOLOGY

19 active registration trials in 2012:

7 Trials completed enrollment, 9 ongoing, 3 to be initiated

Afinitor®

- Diffuse Large B-Cell Lymphoma
- non-functioning Carcinoid
- HER2+ Breast Cancer 1st line
- HER2+ Breast Cancer – 2nd/3rd line
- Hepatocellular Carcinoma

BKM120

- mBC[1] ER+: Fulvestrant mTOR naive
- mBC[1] HER2-: Fulvestrant post-mTOR

Tasigna®

- C-KIT Melanoma
- Path to Cure (Treatment Free Remission)

SOM230

- Cushing's Disease (LAR)[2]
- Acromegaly

INC424

- Polycythemia Vera

LBH589

- Multiple Myeloma

TKI258

- Renal Cell Carcinoma

PKC412

- Acute Myeloid Leukemia
- Aggressive Systemic Mastocytosis

LDE225

- Basal Cell Carcinoma
- Medulloblastoma

LDK378

- NSCLC[3] – chemotherapy & crizotinib refractory

New Trials to be initiated in 2012 | Enrollment Completed | Ongoing

[1] *Metastatic breast cancer*
[2] *Long-acting release form*
[3] *Non-small cell lung cancer*

NOVARTIS ONCOLOGY

Patient selection strategies in multiple programs

10 Companion diagnostics in development

Program	Companion diagnostics	Potential indications
Tasigna®	BCR/ABL (Version 2)	▪ Treatment-free remission in CML[1]
BKM120 **BEZ235** **BYL719**	PIK3CA mutations, PTEN mutations **or** PTEN loss of expression	▪ Breast, NSCLC[2], prostate cancer
PKC412	FLT3 mutation	▪ Newly diagnosed AML[3]
LDE225	Hh 5 gene signature	▪ Medulloblastoma
TKI258	FGFR amplification & mutation	▪ Breast cancer (FGFR amplification) ▪ Endometrial Cancer (FGFR mutation)
MEK162	NRAS mutation	▪ NRAS mutated melanoma
LGX818	BRAF mutation	▪ BRAF mutated melanoma (combination with MEK162)
LDK378	ALK translocation	▪ ALK-translocated NSCLC[2] patients

[1] *Chronic myeloid leukemia*
[2] *Non-small cell lung cancer*
[3] *Acute myeloid leukemia*

Focus for today

1	Afinitor® - mTOR inhibitor
2	BKM120 - PI3K inhibitor
3	LDK378 – ALK inhibitor
4	Jakavi® - JAK1/JAK2 inhibitor
5	Tasigna® - 2nd generation potent BCR-ABL inhibitor

Large parallel Phase III program ongoing; Critical role of mTOR pathway across tumor types

AFINITOR® (everolimus) tablets

5 Indications approved to date

	Registration Studies	Recruitment Status	Expect to File/ Regulatory Status
1.	Kidney Cancer	Complete	**Approved**
2.	Pancreatic NET[2]s	Complete	**Approved**
3.	TSC[3] SEGA[4]	Complete	**Approved**
4.	TSC AML[5]	Complete	**Approved**
5.	ER+ Breast Cancer (BOLERO-2)	Complete	**Approved**
6.	HER2+ Breast Cancer (BOLERO-1 & 3)	Complete	2013 / 2014
7.	Liver Cancer	Complete	2013
8.	Non-functioning Carcinoid	Enrolling	2015
9.	Lymphoma	Enrolling	2015

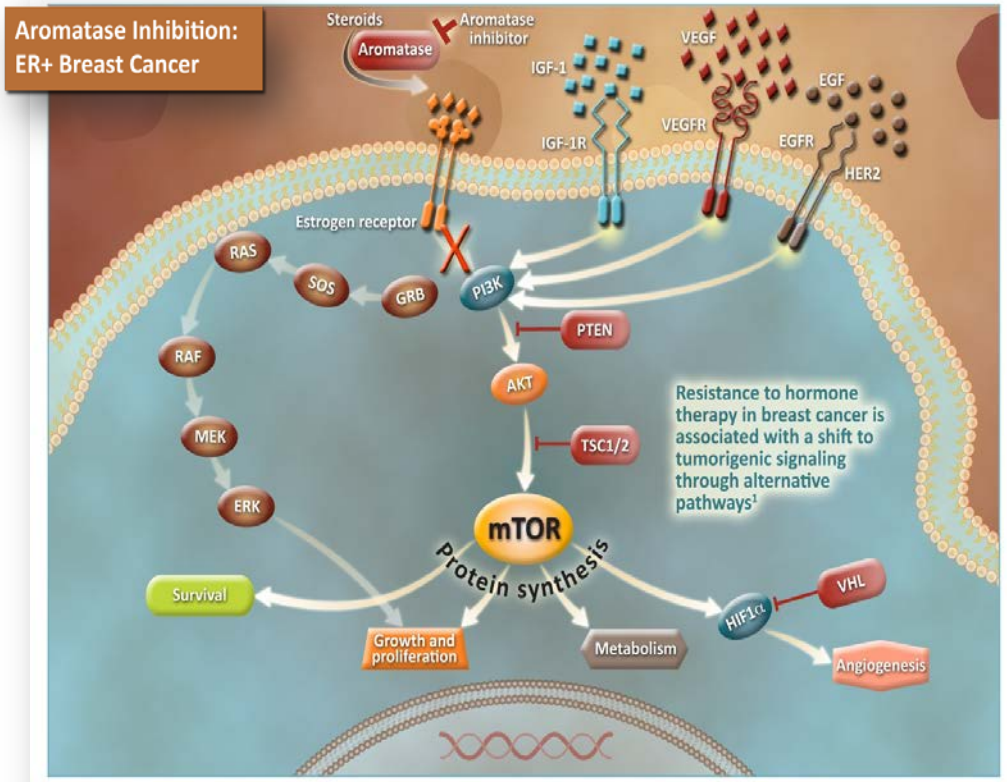
[1] *Worldwide Initiative to Develop Everolimus;*
[2] *Neuro-endocrine tumors;*
[3] *Tuberous sclerosis complex;*
[4] *Sub-ependymal giant cell astrocytoma;*
[5] *Angiomyolipoma*

NOVARTIS ONCOLOGY

Bolero-2 Rationale: Resistance to endocrine therapy is associated with PI3K/mTOR activation

AFINITOR® (everolimus) tablets

- **mTOR is a protein** that regulates cell growth, cellular metabolism and the creation of new blood vessels through angiogenesis
- **In advanced breast cancer,** overactivation of the PI3K/Akt/mTOR pathway promotes estrogen-independent cell proliferation
- **Inhibiting certain cellular** pathways, such as mTOR, PI3K and, potentially, FGFR, is critical to overcoming resistance to endocrine therapy[3,4]



1,2

[1] *Inhibiting the PI3K/Akt/mTOR signaling Pathway. National Cancer Institute. Available at http://www.cancer.gov/cancertopics/understandingcancer/targetedtherapies/breastcancer_htmlcourse/page6. Accessed May 2012.*
[2] *Baselga J. 2011 European Multidisciplinary Cancer Congress. Presentation of late breaking abstract No. 9LBA. September 26, 2011.*
[3] *Normanno N, et al. Endocr Relat Cancer. 2005;12:721-747.* [4] *Di Cosimo S, Baselga J. Nat Rev Clin Oncol. 2010;7:139-147.*

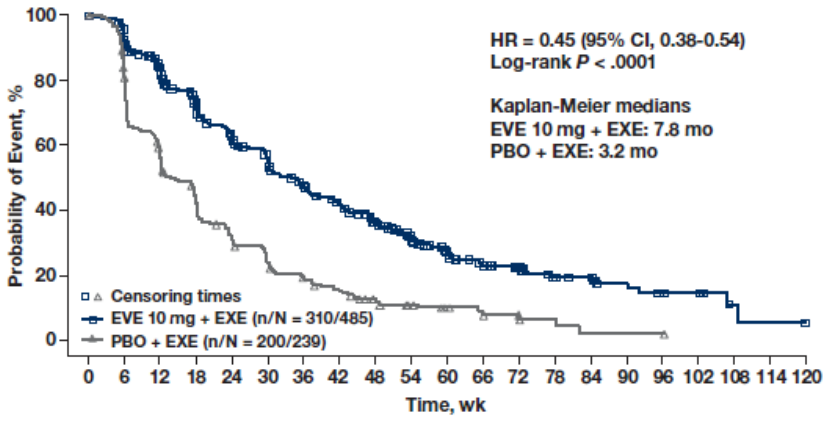
NOVARTIS ONCOLOGY

BOLERO-2: Updated 18-month follow-up[1]

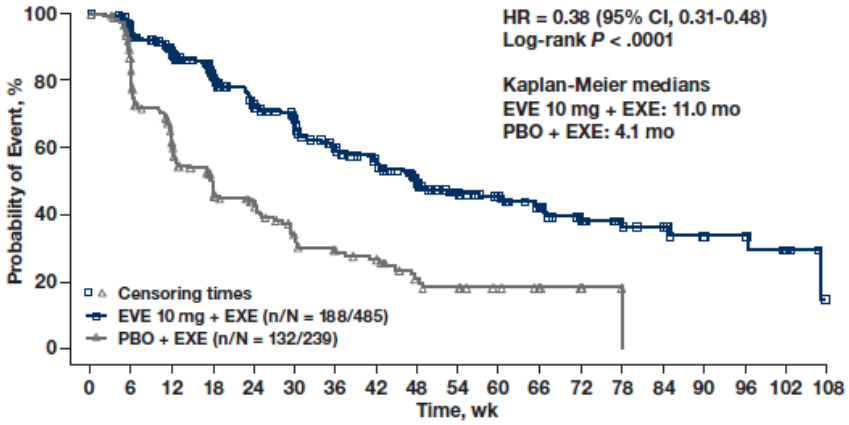
Paradigm shift in the treatment for women with HR+ advanced breast cancer progressing despite NSAI[2] therapy

AFINITOR® (everolimus) tablets

PFS Local Assessment



PFS Central Assessment



Overall Survival (EVE[3] versus PBO[4])

- 2nd Interim Analysis Results
  - 182 events, hazard ratio: 0.77 (0.57-1.04) in favor of Afinitor®
- Final analysis in late 2013 / early 2014 (total of 398 deaths)

[1] ASCO 2012 – Abstract #559
[2] Non-steroidal aromatase inhibitor
[3] Everolimus=Afinitor
[4] Placebo

NOVARTIS ONCOLOGY

Afinitor® in advanced HER2+ Breast Cancer strong rationale

AFINITOR (everolimus) tablets

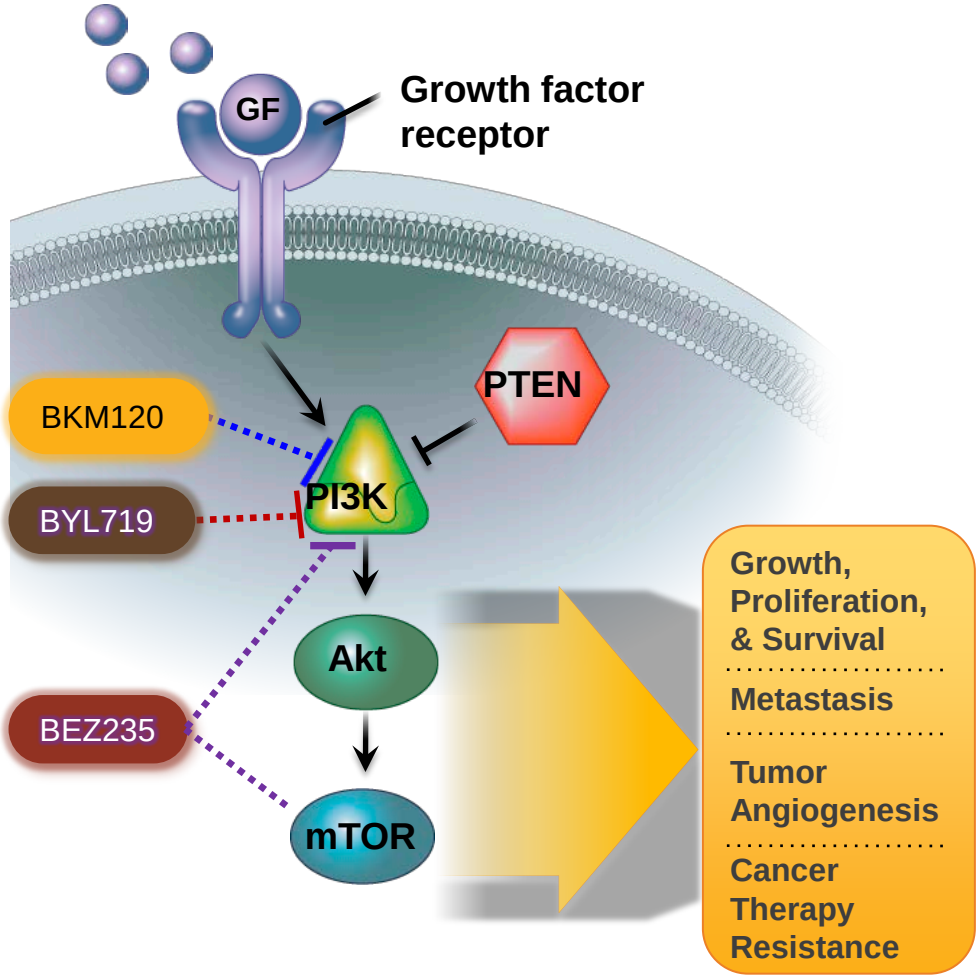
Preclinical[1] & early clinical[2] : combination of Afinitor® with anti-HER2+ treatment (e.g trastuzumab) is synergistic and has the potential to overcome trastuzumab resistance

1st line	2nd line	3rd line
BOLERO-1 (H1, 2014) paclitaxel+trastuzumab +/- Afinitor	BOLERO-3 (H2, 2013) vinorelbine+trastuzumab +/- Afinitor	

[1] *Lu C-H (2007) Clin Cancer Res ; 13 : 5883-8*
[2] *Andre F (2010) J Clin Oncol; 28: 5110-5 and Jerusalem G (2011) Breast Cancer Research and Treatment; 125: 447-455*

NOVARTIS ONCOLOGY

PI3K inhibitors in development



BKM120

- Oral pan-class I PI3K inhibitor of all four class I PI3K isoforms (α, β, γ, δ)[1,2]

BEZ235

- Oral pan-class I inhibitor of PI3K, mTORC1 and mTORC2[3]

BYL719

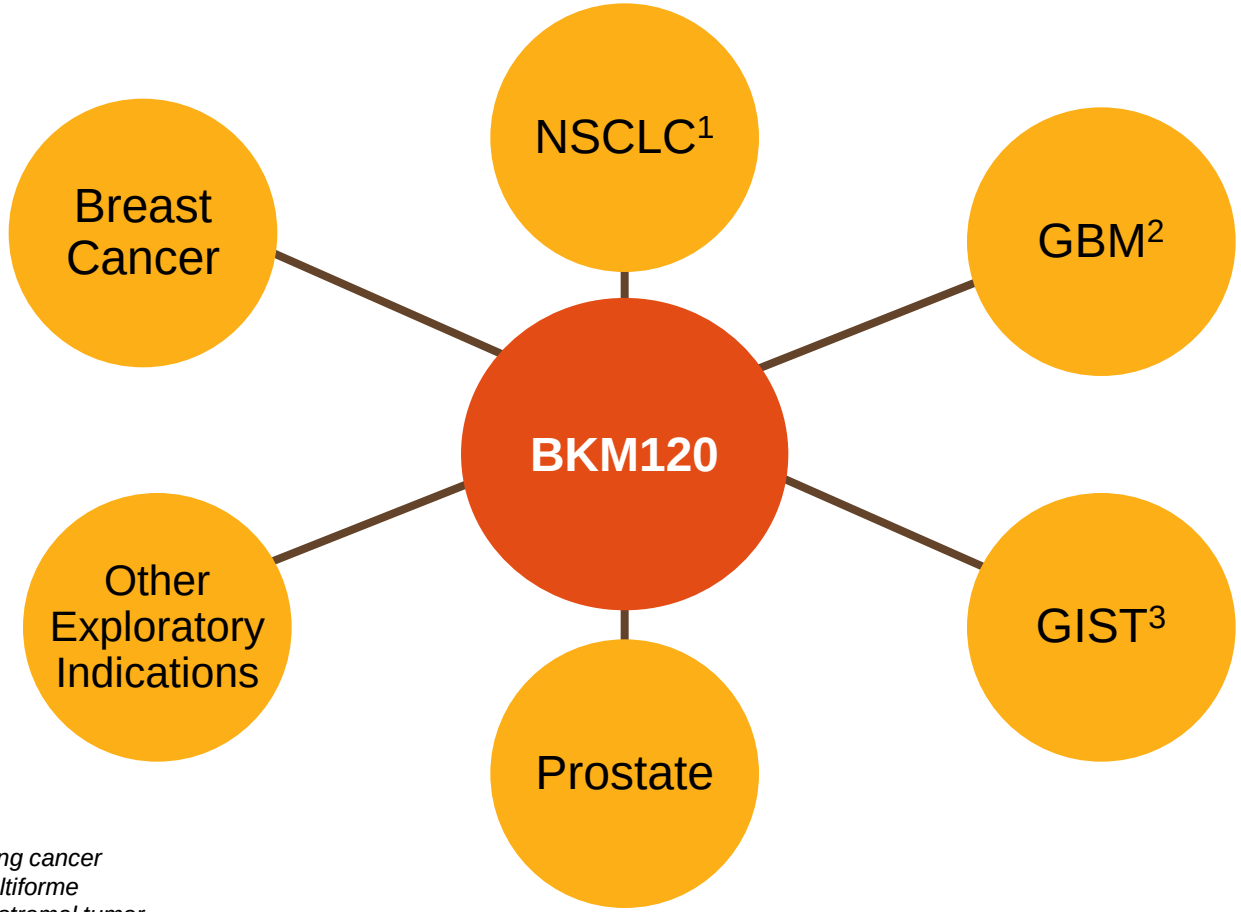
- Oral alpha-selective (p110α) PI3K inhibitor

[1] *Voliva et al. AACR, 2010. Abstract 4498*
[2] *Maira et al. AACR, 2010. Abstract 4497*
[3] *Maira et al. Mol Cancer Ther. 2008;7:1851*

NOVARTIS ONCOLOGY

PRISM:
A broad development program with BKM120

Patient selection and stratification on PI3 kinase activation embedded in all trials



[1] *Non-small cell lung cancer*
[2] *Glioblastoma multiforme*
[3] *Gastro-intestinal stromal tumor*

NOVARTIS ONCOLOGY

BKM120 – Ongoing studies in Breast Cancer

Encouraging activity seen in heavily pre-treated patients

HR+	Combination Partner	Population	Number of Patients Enrolled	Clinical Benefit (CR/PR/SD[1])
Phase I[2] **(Solid tumors)**	single agent	BKM120 dose escalation; prior endocrine and chemotherapy allowed (Phase I)	N=21	47.6% (2 PR [1 unconfirmed], 8 SD)
Phase Ib[3]	letrozole	Prior AI, anti-estrogen and chemotherapy allowed	N=51	47% (1 CR, 1 PR, 22 SD)
HER2+	**Combination Partner**	**Population**	**Number of Patients enrolled**	**Clinical Benefit (CR/PR/SD)**
Phase Ib/II[4]	trastuzumab	Progression on or within 4 weeks after last dose of trastuzumab	N=50	52% (1 CR, 4 PR, 21 SD)

[1] *CR=complete response; PR=partial response; SD=stable disease*
[2] *Grana, B. et. al. ASCO 2011*
[3] *Meyer, I et. al. ASCO 2012*
[4] *Pistillil, B et.al, ESMO 2012*

BKM120 – 2 Phase III in HR+ Breast Cancer initiated

Work in progress in other Breast Cancer sub-groups

					belle
HR+	**Neo-adjuvant**	**1st line Hormonal therapy AI[1]sensitive**	**2nd–3rd line AI[1]-resistant and mTOR Naive**	**3rd–4th line AI[1] and mTOR Pretreated**	**1st Line chemotherapy**
	Planned	Planned	**BELLE-2: Fulvestrant ± BKM120** (Phase III 842 patients) ★	**BELLE-3: Fulvestrant ± BKM120** (Phase III 615 patients) ★	
HER2-	**Neo-adjuvant (triple negative)**	**1st line Chemotherapy**			
	Planned	**BELLE-4: Paclitaxel ± BKM120** (Phase II – 200 pts)			

[1] Aromatase inhibitor

★ Pivotal Studies

NOVARTIS ONCOLOGY

2012 innovative key combinations with PI3 kinase inhibitors

	PI3K inhibitor		Combo partner	Rationale
Solid Tumor	BEZ235$^{PI3K/TOR1/2}$	+	Afinitor®	Dual inhibition of TORC1/2 & PI3K (blockade of feedback loop)
	BKM120^{panPI3K}	+	Afinitor®	Synergistic activity with dual inhibition of TORC1 & PI3K
	BKM120^{panPI3K}	+	LDE225^{SMO}	Hedgehog pathway resistance mediated through PI3K activation
	BYL719$^{PI3K\alpha}$	+	MEK162^{MEK}	Dual inhibition of the PI3K & MEK pathways; synergistic activity in preclinical models
	BKM120^{panPI3K}	+	MEK162^{MEK}	
GIST	BKM120^{panPI3K}	+	Glivec®	Additional mutations in c-kit impart resistance to imatinib w/ activation of PI3K pathway

LDK378: Outstanding data from ALK+ NSCLC[1]

Patients – Refractory to Crizotinib (Phase I study)

Preclinical Data*	LDK378 versus crizotinib: ▪ More potent and selective ALK inhibitor ▪ Longer responses in EML4-ALK crizotinib-resistant and crizotinib-sensitive xenografts
Clinical Data*	**Phase I study in advanced solid tumors is ongoing:** ▪ LDK378 exhibits potent anti-tumor activity in patients with ALK+ NSCLC, including those who have progressed following crizotinib ▪ LDK378 is active in brain metastases ▪ Response rate observed in NSCLC patients treated at ≥ 400 mg who progressed following crizotinib: • Response Rate with PR[2] + CR[3] + uPR[4] = 80% (36/45) • Response Rate with PR +CR = 47% (21/45)

[1] NSCLC: Non-small cell lung cancer [2] PR=partial response [3] CR=complete response [4] uPR=unconfirmed partial response

** Shaw , et al. ESMO Congress, Vienna 2012*

LDK378: Clinical Development Plan

Planned Pivotal Studies	**Initiate 1 pivotal study in Dec, 2012:** ▪ In chemotherapy- and crizotinib-refractory non-small cell lung cancer **Other pivotal trials planned for 2013**
Regulatory Filing	**Planned in 2014**

Jakavi® (JAK1/JAK2 inhibitor): Myelofibrosis & Polycythemia Vera

JAKAVI™ ruxolitinib

Polycythemia Vera

Pivotal Phase III trial vs. **best available care**

- ***Enrollment ongoing***

Myelofibrosis: Combination Studies

+ LBH589

- Mouse model combination with ruxolitinib shows significant reduction of bone marrow fibrosis and allele burden[1]

- ***Other combinations planned with compounds in our portfolio***

[1] *Baffert, Abstract #798, ASH Dec 2011*

NOVARTIS ONCOLOGY

Tasigna®: Paradigm shift in the management of CML[1]

ENESTnd:
Randomized pivotal trial (nilotinib vs. imatinib) in untreated Ph+ CML-CP[2]

- 3 years of follow-up confirms the superiority of nilotinib
- Faster and deeper molecular response 4-log Reduction (MR $^{4.0}$) and 4.5-log Reduction (MR$^{4.5}$)
- Decreased risk of progression to AP/BC[3] and death following progression

ENESTnd: Saglio G. et al, ASH 2011 (Abstract #452)

ENESTcmr:
Randomized trial (nilotinib vs. continuation of imatinib) in Ph+ CML-CP patients who did not achieve a complete molecular response after treatment with imatinib for at least ≥2 years

- 12 months of follow-up shows nilotinib more than doubled in comparison to imatinib the rate of:
  - Confirmed Complete Molecular Response
  - Complete Molecular response 4-log Reduction (MR $^{4.0}$)
  - Complete Molecular response 4.5-log Reduction (MR $^{4.5}$)
- 5 year follow up is planned

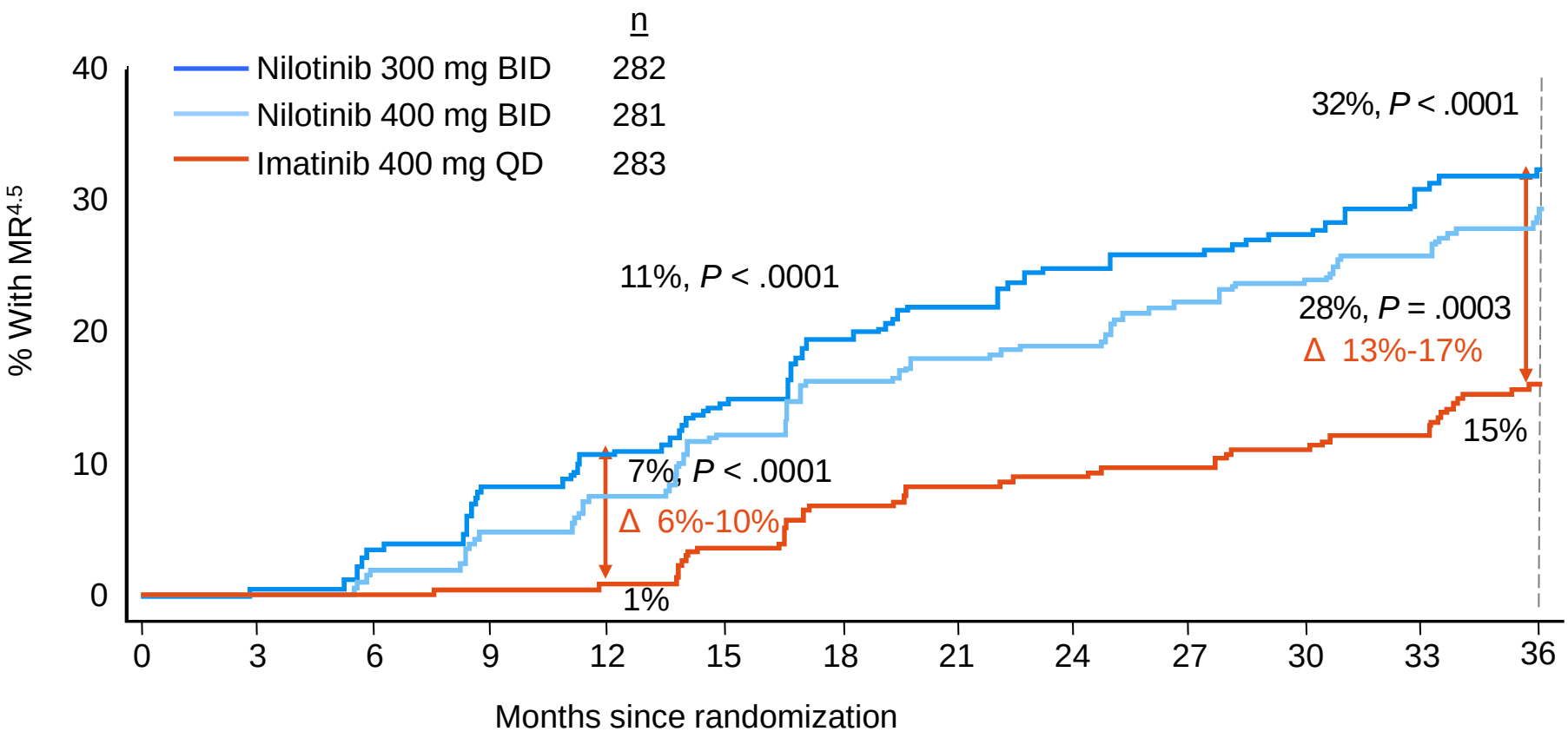
ENESTcmr: Hughes et al. ASH 2011 (Abstract #606)

[1] *Chronic myeloid leukemia*
[2] *Chronic phase*
[3] *Acute phase / blast crisis*

Rationale for treatment-free remission strategy

Deeper & faster molecular response with Tasigna®

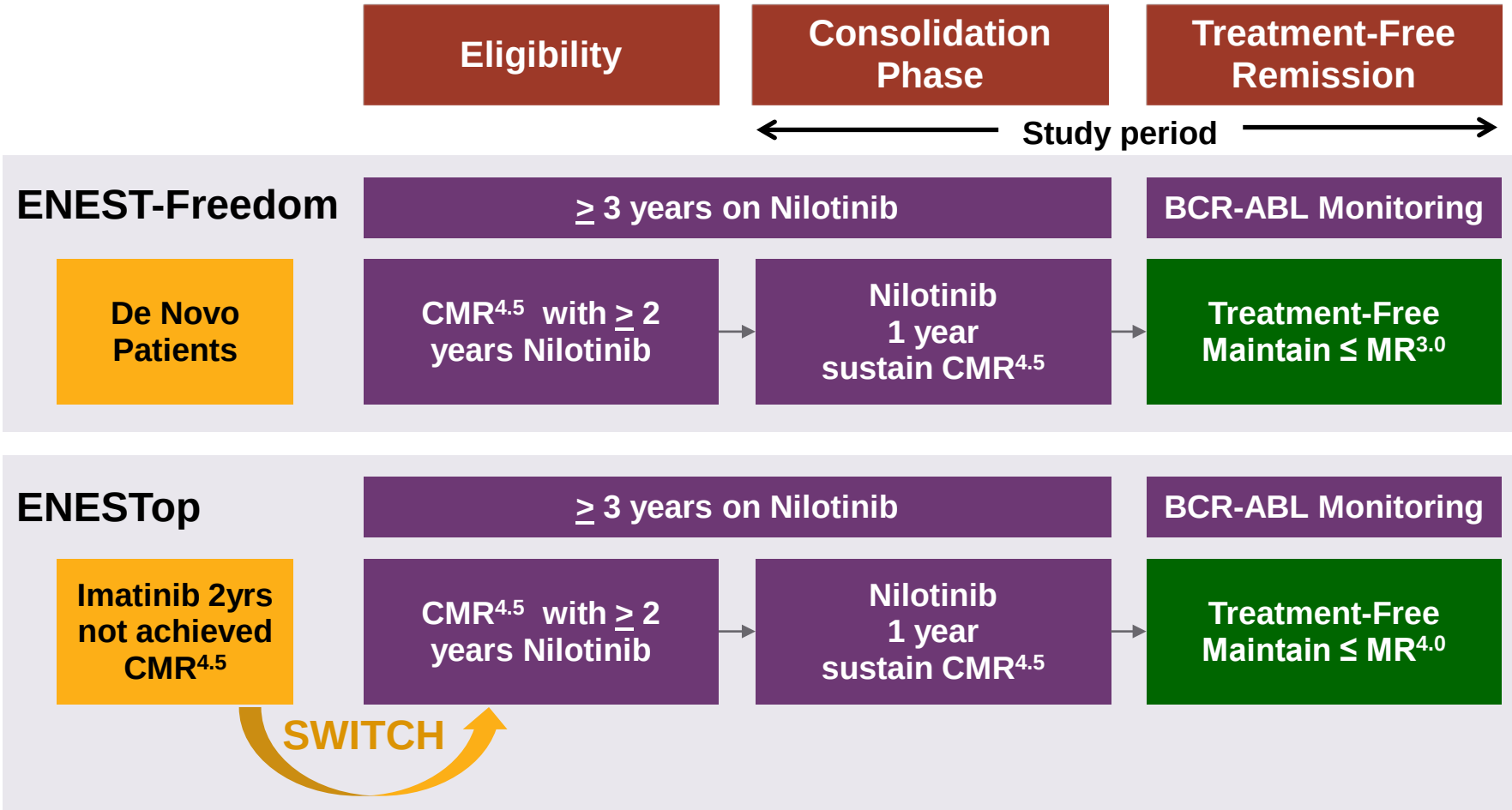
ENESTnd 36 month follow-up cumulative incidence of MR4.5



Saglio G. et al, ASH 2011 (Abstract #452)
** 4.5 log reduction of bcr-abl transcript*

Treatment free remission: 2 international trials expected to start recruitment in Q1 2013

Path to Cure Strategy



Oncology Portfolio: Planning for expected key activities in 2013-2014

- Target Regulatory Approvals expected in **4 NCEs**
- **Exjade®**: Expected approval in non-transfusion-dependent thalassemia
- **Signifor®**: Expected approval in acromegaly
- **Afinitor®**: Further expand label
- Accelerate development in:
  - **Tasigna®**: Treatment-Free Remission strategy for CML
  - **PI3 Kinase Programs**: BKM120, BEZ235 & BYL719
  - **ALK Inhibitor**: LDK389
  - **HSP90 Inhibitor**: AUY922
  - **MEK Inhibitor**: MEK162
  - **BRAF Inhibitor**: LGX818
- **Pivotal Trials:** Results expected from **13 trials**

2013 – 2014 Expected newsflow: Results from 13 pivotal trials

2013	2014
Afinitor® Hepatocellular carcinoma – 2nd line	**Afinitor®** HER2+ breast cancer 1st line
Afinitor® HER2+ breast cancer – 2nd/3rd line	**Afinitor®** Diffuse large B-cell lymphoma - maintenance
LBH589 Multiple myeloma – 2nd line	**Afinitor®** Non-functioning carcinoid
PKC412 FLT3+ Acute myeloid leukemia – 1st line	**Jakavi®** Polycythemia vera
Tasigna® cKIT mutated melanoma – 1st line	**LDK378** ALK+ Non-small cell lung cancer
TKI258 Renal cell carcinoma – after mTOR	**LDE225** Basal cell carcinoma – 1st line
PKC412 Aggressive systemic mastocytosis	

One of the largest regulatory filing charts in the industry

Planned filings 2013 to ≥ 2016

2013	2014	2015	≥ 2016
LBH589 Multiple Myeloma	**LDK378** (ALK - NSCLC)	**BKM120** (PI3K – Breast Cancer)	**AUY922** (Hsp 90 – Solid Tumors)
TKI258 RCC[1]	**PKC412** AML[3]	**Afinitor®** Lymphoma	**BEZ235** (PI3K – Solid Tumors)
Afinitor® HER2+ Breast Cancer 2nd Line	**LDE225** Basal Cell Carcinoma	**Afinitor®** Non-functional carcinoid tumor	**BYL719** (PI3K – Solid Tumors)
Afinitor® HCC[2]	**Afinitor®** HER2+ Breast Cancer 1st Line	**Signifor ®** Cushing's disease LAR	**CTL019** Leukemia
Signifor ® Acromegaly	**INC424** Polycythemia Vera		**LCI699** (Aldos. – Cushing's)
	PKC412 ASM[4]		**LGX818** (Raf – Melanoma)
	Tasigna® cKIT Melanoma		**MEK162** (MEK – Melanoma)
			BKM120 Solid tumors
			LDE225 Solid tumors
			TKI258 Solid & Hemat. tumors

New molecule
New Indication
New formulation

[1] *Renal Cell Carcinoma*
[2] *Hepatocellular carcinoma*
[3] *Acute myeloid leukemia*
[4] *Aggressive systemic mastocytosis*

Back-Up

NOVARTIS
ONCOLOGY

Key Oncology and Hematology Projects

Exploratory Trials	Confirmatory Trials (Phase I/II)	Registration Trials (Phase III or pivotal)		Filed (in Registration)
BGJ398 Solid tumors	**AUY922** Solid tumors	**LBH589** Multiple Myeloma	**PKC412** AML[2]	**Signifor®** Cushing's disease
BHQ880 Myeloma	**BEZ235** Solid tumors	**LDE225** Basal Cell Carcinoma	**TKI258** RCC[3]	**Exjade®** NTDT[6]
INC280 Solid tumors	**RAF265** Melanoma	**BKM120** Breast Cancer	**INC424** Polycythemia Vera	**Afinitor®** TSC AML[5]
LCL161 Solid tumors	**MEK162** Solid tumors	**Afinitor®** HER2+ Breast Cancer 1st Line	**PKC412** ASM[4]	
LEE011 Solid tumors	**LCI699** Cushing's Syndrome	**Afinitor®** HER2+ Breast Cancer 2nd Line	**Signifor®** Acromegaly	
LEQ506 Solid tumors	**LGX818** **Solid tumors**	**Afinitor®** HCC[1]	**Afinitor®** Non-functional carcinoid tumor	
LFA102 Solid tumors	**LDK378** NSCLC	**Afinitor®** Lymphoma		
AEB071 Solid tumors	**CTL019** Leukemia			
LGK974 **Solid tumors**	**BYL719** Solid tumors			
LGH477 Hemat. Tumors	**BKM120** Solid tumors			
TAS266 Solid tumors	**LDE225** Solid tumors			
LJM716 Solid tumors	**Signifor®** Rare neuroendocrine tumors			
VAY736 Leukemia	**LBH589** Hemat. tumors			
	Tasigna® cKIT Melanoma			
	TKI258 Solid & Hemat. tumors			
	Afinitor® Solid tumors			

[1] *Hepatocellular carcinoma*
[2] *Acute myeloid leukemia*
[3] *Renal Cell Carcinoma*
[4] *Agressive systemic mastocytosis*
[5] *Tuberous sclerosis complex angiomyolipomas*
[6] *Non-Transfusion-Dependent Thalassemia*

New molecule

New Indication

NOVARTIS ONCOLOGY