Monthly DRUP newsletter 66, 01 September 2021

Dear all,

We hope you all had a wonderful summer!

This month we are very excited to share with you that **the DRUP study has been open for inclusion for 5 years!** This is a great achievement and the study team would like to thank everyone who is making this all possible! Without our 16 collaborating pharmaceutical companies throughout the years and our 35 participating sites, we would not have been where were we are today. Since the start in 2016 the study has been growing to become one of the biggest oncological interventional studies in the Netherlands. In these 5 years we have received more than 1800 patient submissions, 910 of which have started on one of the 32 available treatments within DRUP. Also our first 3rd stage cohort is almost full, with 120 enrolled patients already in two years' time. However, even though we are very proud about what the study has achieved until now, we are continuously looking for new therapeutic options to be able to reach out to even more patients in the future. Furthermore, we have also been able to look into the data of the first 500 patients and we are hoping to share this with you in the very near future.

Next to the above; it should not go unmentioned that our European collaborators have put in great effort as well to get DRUP-like trials set up in their own countries. These trials all have a similar study set up as DRUP, enabling us to share data with each other and in this way achieve better and faster results. The three Scandinavian trials are already open for inclusion, and more countries are following right behind. We are very excited about the future collaboration!

Information for participating sites

We would kindly like to ask you to involve the DRUP study team when a patient is eligible for **a treatment pause** after immunotherapy, in accordance with criteria stated in the drug specific manual. This information is important to us as well and is a decision that always should be made in consultation with the DRUP study team. Furthermore, the **Panitumumab cohort for GMB** has reached 24 patients and is therefore closed for inclusion from now onwards.

Update new website

We are very pleased to inform you that we have added some new features to our website (www.drupstudy.nl); after logging in you will now be able to find more information about all available drugs and treatments within DRUP, see tab COHORTS. Further, from now onwards our most recent newsletter, as well as previous editions, will be available as downloads and it will also be possible to submit a patient via a link on the website. For the once who haven't received the log in details yet please contact the DRUP study team at drup@nki.nl. Also, remarks or suggestions for improvement of the new website are very welcome!

Events & meetings

September 27th the next **semi-annual pharma meeting** is scheduled. We are looking forward to seeing you all again and be able to update you on study progress, data and more!

Last but not least, **Stelvio for Life** edition the 9th edition took place on August 28th. We would like to express our gratitude to all participants and supporters for this great initiative! Hopefully we will see you again for next years 'edition.

Best regards,

Henk Verheul, Hans Gelderblom and Emile Voest, Principle Investigators
Maxime van Berge Henegouwen, Laurien Zeverijn, Gijs de Wit and Birgit Geurts, study coordinators
Lena Bilet, trial manager

List of pharmaceutical companies & study drugs

Confidential, list might be subjected to change

Currently available

Amgen	Eisai	Bayer	Roche
Panitumumab	Lenvatinib	Regorafenib	Erlotinib
			Trastuzumab +
BMS	AstraZeneca	Clovis Oncology	Pertuzumab
Nivolumab	Olaparib	Rucaparib	Vemurafenib +
Ipilimumab	Durvalumab		Cobimetinib
		MSD	Vismodegib
Novartis	Pfizer	Pembrolizumab	Atezolizumab +
Dabrafenib	Axitinib		bevacizumab
Nilotinib	Crizotinib	Lilly	Alectinib
Trametinib	Sunitinib	Abemaciclib	Entrectinib
Ribociclib	Palbociclib		
Alpelisib	Talazoparib,	BI	
	dacomitinib	Afatinib	
	Lorlatinib		

Committed

Janssen
Erdafitinib

Calendar & publicity

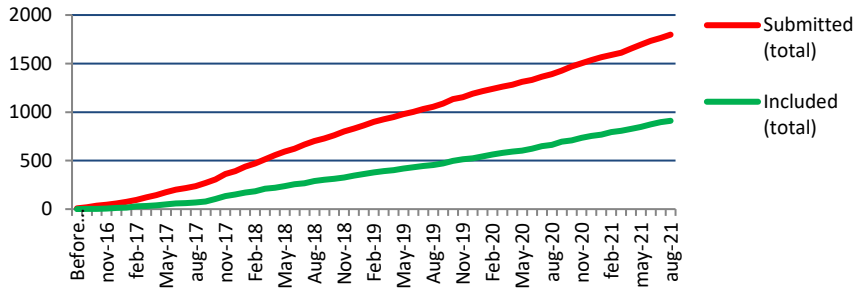
SEPTEMBER

27th of September **Semi-annual pharma meeting**

Submission and accrual overview

September 1st, 2021

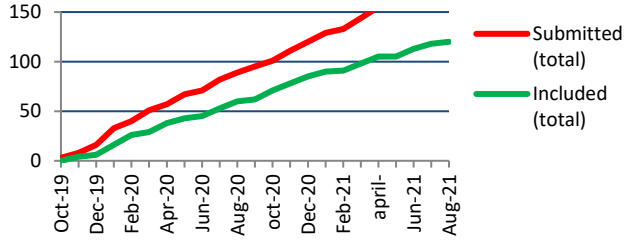
Submitted	1798
Excluded	783 (43.6%)
Pending	105 (5.8%)
Enrolled	910 (50.6%)



Submissions and accrual 3rd stage cohort Nivolumab for MSI tumors

September 1st, 2021

Submitted	172
Excluded	43 (25.0%)
Pending	9 (5.2%)
Enrolled	120 (69.8%)



Participating sites

Currently open for inclusion (*n* = 35)

- AMC
- AVL
- Amphia
- Bravis
- Deventer Ziekenhuis
- Erasmus MC
- ETZ
- Franciscus
- Gelderse Vallei
- Gelre Ziekenhuizen
- Haaglanden MC
- Haga ziekenhuis
- Isala
- Martini
- Maxima MC
- MC Leeuwarden
- Meander
- Nij Smellinghe
- Treant Zorggroep
- NWZ
- Reinier de Graaf
- Rijnstate
- Spaarne Gasthuis
- St. Antonius
- UMC Groningen
- UMC Leiden
- Maastricht UMC
- Radboud UMC
- UMC Utrecht
- VieCuri
- ZG Twente
- Zuyderland
- Rivas Zorggroep
- OLVG
- VUMC

In preparation (*n*=2)

- Maasstad
- Bernhoven

DRUGS OPEN FOR INCLUSION			
Nilotinib	KIT_{mut} GIST	$PDGFRA_{mut}$ GIST	$PDGFRA_{mut}$ mesothelioma
	$PDGFRB_{ampl}$ CRC	KIT_{mut} melanoma	
Nivolumab	MSI tumors	HML tumors	3rd stage MSI tumors
Nivolumab + ipilimumab	HML tumors		
Olaparib	ATM_{mut} tumors	$BRCA_{mut}$ tumors	HRR deficient tumors (2x)
Panitumumab	RAF/RAS_{wt} sarcoma	RAF/RAS_{wt} HNSCC	$EGFR_{mut}$ NSCLC
	RAF/RAS_{wt} thyroid ca	RAF/RAS_{wt} salivary duct ca	RAF/RAS_{wt} cervical ca
	RAF/RAS_{wt} endometrial ca	RAF/RAS_{wt} meningioma	RAF/RAS_{wt} eye melanoma
	RAF/RAS_{wt} GBM	RAF/RAS_{wt} vulvar ca	RAF/RAS_{wt} ACUP
	RAF/RAS_{wt} anal ca		
Pembrolizumab	HML CRC	HML eso/card/stomach	HML HNSCC
	HML prostate ca	HML breast ca	HML miscellaneous
	HML > 290 (all type)		
Regorafenib	RET+ NSCLC	RET+ neuroblastoma	KIT_{mut} melanoma
	KIT_{mut} Thymuscarcinoma	$BRAF_{mut}$ ACC	$FLT1_{ampl}$ duodenal carcinoma
Dabraf + Tramet	$BRAF_{mut}$ NSCLC	$BRAF_{mut}$ GBM	$BRAF_{mut}$ low grade glioma
	$BRAF_{mut}$ NEC	$BRAF_{mut}$ cholangiocarcinoom	$BRAFV600E_{mut}$ breast cancer
	$BRAFV600E_{mut}$ grade 3 glioma		
Dabrafenib	$BRAF_{mut}$ GBM	$BRAF_{mut}$ UCC	
Trametinib	$NRAS_{mut}$ ovarian ca	$MAP2K1_{mut}$ NSCLC	$NRAS_{mut}$ NSCLC
	$MAP3K1_{mut}$ NEC	$MAP3K1_{mut}$ cervical ca	$MAP2K1_{mut}$ CRC
	$MAP2K4_{mut}$ CRC	$MAP3K1_{mut}$ ACUP	$MAP2K4_{mut}$ cholangioca
	$MAP2K4_{mut}$ ovarian ca	$MAP3K1_{mut}$ breast ca	$MAP2K4_{mut}$breast ca
	$NRAS_{mut}$ thyroid cancer	$MAP3K1_{mut}$ prostate	$NRAS_{mut}$ pleomorphic tumor
	$NRAS_{mut}$ prostate	$BRAF_{fusie}$ (pilocytair) astrocytoom	$NRAS_{mut}$ yolk sac tumor
	$GNA11_{mut}$ melanocytaire tumor	$NRAS_{mut}$ cholangio cancer	$BRAF_{exon\ 12\ deletion}$ NSCLC
	$BRAF_{fusie}$ NSCLC	$NRAS_{mut}$ salivary duct ca	$MAP2K4_{loss}$ pancreas cancer
	$NF1_{mut}$ low grade glioma	$BRAF_{fusie}$ pancreas cancer	$MAP2K1_{mut}$ pancreas cancer
	$MAP2K1_{mut}$ stomach cancer		
Trastuz. + Pertuz.	$HER2_{ampl}$ CRC	$HER2_{ampl}$ cholangio ca	$HER2_{mut}$ NSCLC
	$HER2_{mut}$ ovarian ca	$HER2_{ampl}$ salivary duct ca	$HER2_{ampl}$ NSCLC
	$HER2_{mut}$ CRC	$HER2_{mut}$ cervical ca	$HER2_{ampl}$ vulvar ca
	$HER2_{ampl}$ cervical ca	$HER2_{ampl}$ hidradenoca	$HER2_{ampl}$ UCC
	$HER2_{ampl}$ ovarian ca	$HER2_{ampl}$ NEC	$HER2_{mut}$ UCC
	$HER2_{mut}$ ACC	$HER2_{ampl}$ duodenal cancer	
Vemur. + Cobimet.	$BRAF_{mut}$ salivary duct	$BRAF_{mut}$ ACUP	$BRAF_{mut}$ ovarian ca
	$BRAF_{mut}$ thyroid ca	$BRAF_{non\text{-}V600mut}$ NSCLC	$BRAF_{V600Emut}$ Erdheim Chester Disease
Vismodegib	$PTCH1_{mut}$ sarcoma	$PTCH1_{mut}$ medulloblastoma	
Erlotinib	EGFRmut GBM	CRC with EGFR mutations	
Lenvatinib	$FGFR1_{ampl}$ CRC	$FGFR2_{ampl}$ CRC	$FGFR2_{ampl}$ breast ca
	$FGFR1_{ampl}$ osteosarcoma	$FGFR1_{ampl}$ NSCLC	$FGFR3_{mut}$ anal ca
	$FGFR2_{ampl}$ esophageal ca	$FGFR2_{mut}$ endometrial ca	$FGFR3_{ampl}$ SGT
	$FGFR2_{fusie}$ ACUP	$FGFR2_{fusie}$ cholangioca	$FGFR1_{ampl}$ breast ca
	$FGFR2_{ampl}$ urachal ca	$FGFR3_{mut}$ UCC	$FGFR2_{mut}$ ACC
	$FGFR3_{amp}$ NEC nasal cavity	$FGFR1_{mut}$ glioneural tumor	$FGFR3_{mut}$ HNSCC
	$FGFR3_{fusie}$ GBM	$FGFR2_{mut}$ digital papillary cancer	$FGFR2_{fusion}$ pancreas cancer
	$FGFR2_{amp}$ NSCLC	$FGFR3_{fusie}$ cholangioca	$FGFR2_{mut}$ cholangioca/biliary tract
	$FGFR1_{amp}$ pancreas cancer	$FGFR2_{mut}$ salivary duct cancer	
Sunitinib	KIT_{mut} thymus ca	$PDGFRA_{mut}$ prostate ca	$FGFR1_{ampl}$ UCC
	$PDGFRB_{ampl}$ breast ca	$PDGFRB_{mut}$ osteosarcoma	$PDGFRA_{ampl}$ ACC
	$FGFR1_{ampl}$ ovarian cancer	$PDGFRA_{ampl}$ tyroid cancer	$FTL3_{ampl}$ CRC
	$CSF1R_{mut}$ CRC	KIT_{ampl} NSCLC	$FGFR2_{ampl}$ ovarian cancer
Crizotinib	ALK_{fus} IMT	MET_{ampl} CRC	ALK_{mut} CRC
	MET_{mut} NSCLC	MET_{ampl} esophageal ca	MET_{ampl} NSCLC
	ALK_{mut} thyroid	ALK_{fus} leiomyosarcoma	ALK_{fusion} CUP
	MET_{fusion} anaplastic tyroid cancer	MET_{ampl} HCC	MET_{ampl} GEJ-tumor
	MET_{amp} ovarium cancer		
Axitinib	$FLT1_{ampl}$ CRC		
Rucaparib	HRR_{alt} ovarian cancer	HRR_{alt} prostate cancer	HRR_{alt} pancreatic cancer
	HRR_{alt} miscellaneous	HRR_{alt} Breast cancer	
Alectinib	ALK fusion (all tumor types)		
Abemaciclib	$CCND1_{ampl}$ UCC	$CCND1_{ampl}$ NSCLC	$CCND1_{ampl}$ prostate cancer
	$CCND1_{ampl}$ melanoma	$CCND3_{ampl}$ small intestine	CDK4ampl (lipo)sarcomen
Alpelisib	Miscellaneous tumors with $PIK3CA_{mut}$	$PIK3CA_{mut}$SCC gynecologic tumors	PIK3CAmut gynecologic tumors
	PIK3CAmut upper-GI tumors	PIK3CAmut HNSCC	
Talazoparib	Tumors with HRD signature		
Legend	Cohort closed	Cohort on hold	Slots available

DRUGS CLOSED FOR INCLUSION			
Palbociclib	$CDKN2A_{loss}$ GBM	$CDKN2A_{loss}$ CRC	$CDKN2A_{loss}$ PEComa
	$SMARCA4_{mut}$ ovarian ca	$CDKN2A_{mut}$ cholangio ca	$CDKN2A_{mut}$ melanoma
	$CDKN2A_{loss}$ duodenal ca	$CCND1_{ampl}$ NSCLC	$CDKN2A_{loss}$ RCC
	$CDKN2A_{loss}$ HNSCC	$CDKN2A_{del}$ esophageal ca	$CCND1_{ampl}$ melanoma
	$CDKN2A_{mut}$ uveal melanoma	$CDK4_{ampl}$ Sarcoma	$CCND1_{ampl}$ NET
	$CDKN2A_{loss}$ pancreatic ca	$CDKN2A_{loss}$ vulvar ca	$CDK4_{ampl}$ astrocytoma
	$CDKN2A_{del}$ NSCLC	$CDK4_{ampl}$ prostate cancer	$CDK4_{ampl}$ esophageal cancer
	$CDKN2A_{loss}$ pNET	$CDKN2A_{loss}$ ovarian cancer	$CCND2_{ampl}$ CRC
	$CDK6_{ampl}$ prostate cancer	$SMARCA4_{mut}$ CRC	
Durvalumab	MSI tumors		
Cabozantinib	MET_{ampl} melanoma	RET_{fusion} NSCLC	MET_{ampl} teratoma
	$NTRK2_{mut}$ GIST	MET_{mut} oesofagus cancer	
Ribociclib	$CDKN2A_{loss}$ prostate cancer	$CDKN2A_{loss}$ ependymoma	$CDK4_{ampl}$ melanoma
	$CDKN2A_{del}$ anaplastic meningioma	$CDKN2A_{loss}$ thymus carcinoma	$CDKN2A_{loss}$ Ewing Sarcoma
	$CDKN21_{del/mut}$ bladder cancer	$CDK6_{amp}$ mucoepidermoid cancer	$CDKN2A_{del}$ mesothelioma
	$CDKN2A_{loss}$ ceruminous cancer	$CDKN2A_{del}$ salivary gland cancer	
Afatinib	$NRG1_{fusie}$ NSCLC	$NRG1_{fusie}$ breast ca	$NRG1_{fusie}$ GI tumors
	$NRG1_{fusie}$ miscellaneous (all tumors)	$HER4_{mut}$ NSCLC	
Legend	Cohort closed	Cohort on hold	Slots available