

Reuniones locales GETNE

ANDALUCÍA

Córdoba

Hotel Córdoba Center
Av. de la Libertad, 4

26.09.2024



17:55-18:10h

Otras opciones de indicaciones

Dr. Tomás Martín. Endocrinología y Nutrición. Hospital Universitario Virgen Macarena, Sevilla



Organiza



Con el patrocinio de



Con el aval científico de



Sede

Hotel Córdoba Center
Av. de la Libertad, 4, Noroeste
14006 Córdoba

Secretaría Técnica



getne@getne.org
Tel.: 934 344 412



Santa Filomena.

IGLESIA DE SAN JULIÁN Y SANTA BASILISA (ISLA)

INDICACIONES EN FICHA TECNICA

Tratamiento en **adultos*** para el tratamiento de tumores neuroendocrinos gastroenteropancreáticos (**TNE-GEP**) positivos al receptor de la somatostatina, **bien diferenciados** (G1 y G2), **progresivos** e **irresecables** o **metastásicos**

* > 12 años FDA



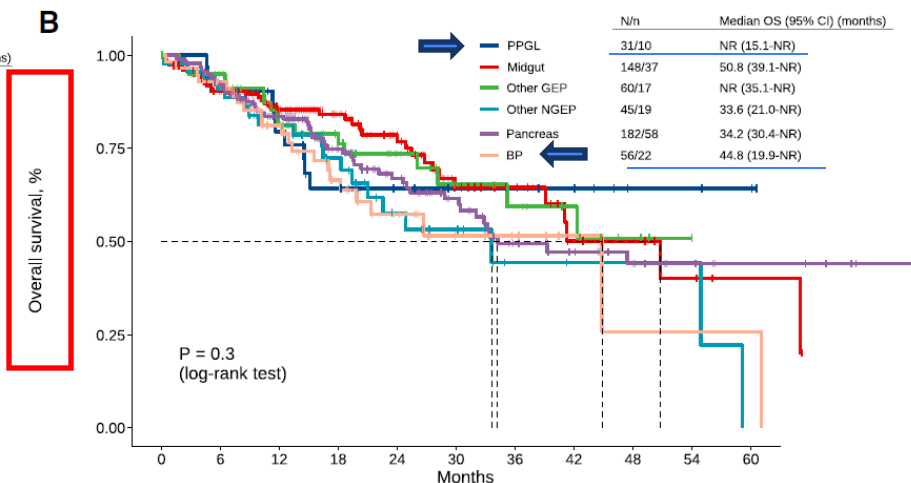
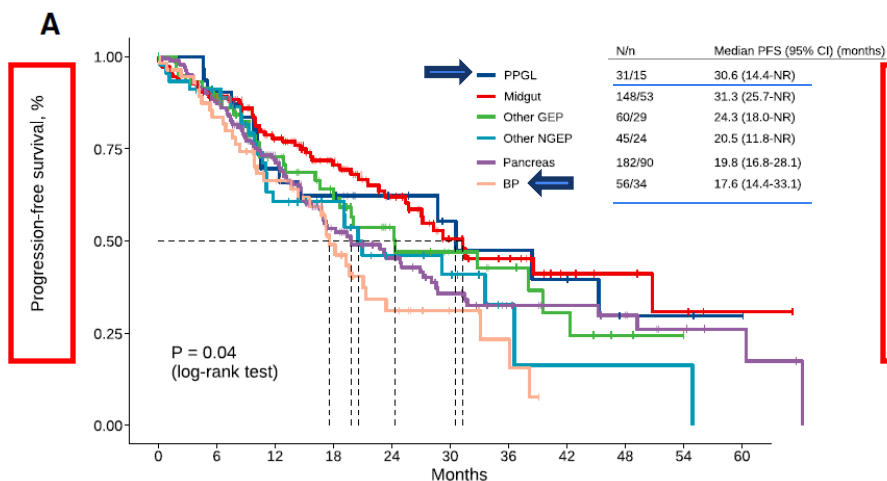
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* > 12 años FDA



Efficacy of [¹⁷⁷Lu]Lu-DOTATATE in metastatic neuroendocrine neoplasms of different locations: data from the SEPTRALU study

Mercedes Mitjavila¹ · Paula Jimenez-Fonseca² · Pilar Belló³ · Virginia Pubul⁴ · Juan Carlos Percovich⁵ · Amparo García-Burillo⁶ · Jorge Hernando⁷ · Javier Arbizu⁸ · Emilia Rodeño⁹ · Montserrat Estorch¹⁰ · Belén Llana¹¹ · Maribel Castellón¹² · Lina García-Cañamaque¹³ · Pablo Gajate¹⁴ · María Carmen Riesco¹⁵ · María Begoña Miguel¹⁶ · David Balaguer-Muñoz¹⁷ · Ana Custodio¹⁸ · Juana María Cano¹⁹ · Alexandra Repetto²⁰ · Pilar García-Alonso²¹ · María Angustias Muros²² · Jose Luis Vercher-Conejero²³ · Alberto Carmona-Bayonas²⁴ 



SEPTRALU: Serie Española de Pacientes Tratados con Radionúclido Lu-177

26 Centros. 813 pacientes. (2017-202...)



Sin embargo, una gran parte de los tumores que sobreexpresan receptores de somatostatina (SSTR) aún no tienen indicación autorizada para recibir tratamiento con Lutathera®

Resumiremos los **resultados** obtenidos con el tratamiento con ¹⁷⁷Lu]Lu-DOTATATE en distintas patologías **fuera de las indicaciones** actuales de la medicación pero con **resultados** potencialmente **beneficiosos** para los pacientes afectados de las mismas

- Carcinoides bronquiales
- Meningiomas
- Feocromocitoma/Paraganglioma
- Neuroblastomas
- Carcinoma Medular de Tiroides
- *TNE-GEP G3 y CNE (NETTER-2, COMPOSE...)

CARCINOIDES BRONQUIALES

- ❑ Representan entre el 1- 2 % de los cánceres de pulmón y entre el 20-30 % de todos los TNE. La supervivencia a 10 años para el **carcinoides típico** en estadio IV es del **47 %** y para el **carcinoides atípico** del **18 %**.
- ❑ La clínica inicial son síntomas respiratorios no específicos relacionados con el tumor o incidentales. Una minoría de casos presenta síntomas relacionados con hipersecreción hormonal, como el **síndrome carcinoides (SC)**, el **síndrome de Cushing** y la **acromegalia**.
- ❑ Aproximadamente el **80 % de los carcinoides pulmonares bien diferenciados expresan receptores de SS** (SSTR2 y SSTR 1) que se pueden evidenciar mediante pruebas de imagen (**PET-Ga-68, Octreoscan**) representando un predictor de la respuesta al tratamiento con PRRT.
- ❑ La **NCCN** en 2019 y **ESMO** 2021 recomiendan considerar la PRRT con Lu-177 como una opción de tratamiento para pacientes seleccionados con **carcinoides típico y atípico avanzado y/o metastásico SSTR positivos y que muestran progresión de la enfermedad** mientras reciben SSA.



WHO 2022 classification of pulmonary neuroendocrine tumors.

Well-differentiated NET	Low-grade NET	Typical Carcinoid/Grade 1 NET	< 2 mitoses/2mm ² and no necrosis
	Intermediate-grade NET	Atypical Carcinoid/Grade 2 NET	2-10 mitoses/2mm ² and/or necrosis
		Carcinoids with elevated mitotic counts and/or Ki-67 proliferative index	Atypical carcinoid morphology with > 10 mitoses/2mm ² and/or Ki-67 >30%
Poorly differentiated NEC	High-grade NEC	Small Cell Lung Carcinoma	>10 mitoses/2mm ² and small cell morphology
		Large Cell Neuroendocrine Carcinoma	>10 mitoses/2mm ² and large cell morphology

Abbreviations: NEC, neuroendocrine carcinoma; NET, neuroendocrine tumor.

CARCINOIDES BRONQUIALES

AUTOR	N	ORR	DCR (CR+PR+SD)	PFS (meses)	OS (meses)
Van Eseen 2007	9	56%	89%	-	-
Mariniello 2016	48	13%	75%	23	59
Ianniello 2016	34	15%	62%	18,5	48,6
Brabender 2017	23	39%	60%	20	52
Parghane 2017	19		-	-	40
Sabet 2017	22	27%	68%	27	42
Garske-Roman 2018	6	17%	-	18	19
Lim 2020	48	33%	83%	-	49
Mirvis 2020	25		-	17	42
Zidan 2022	48	32%	56%	23	59
Pooled	282	33%	70%	21	46



Park, H & Subramaniam R, PET Clin 2023

CARCINOIDES BRONQUIALES

AUTOR	N	ORR	DCR (CR+PR+SD)	PFS (meses)	OS (meses)
Van Eseen 2007	9	56%	89%	-	-
Mariniello 2016	48	13%	75%	23	59
Ianniello 2016	34	15%	62%	18,5	48,6
Brabender 2017	23	39%	60%	20	52
Parghane 2017	19		-	-	40
Sabet 2017	22	27%	68%	27	42
Garske-Roman 2018	6	17%	-	18	19
Lim 2020	48	33%	83%	-	49
Mirvis 2020	25		-	17	42
Zidan 2022	48	32%	56%	23	59
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— BP

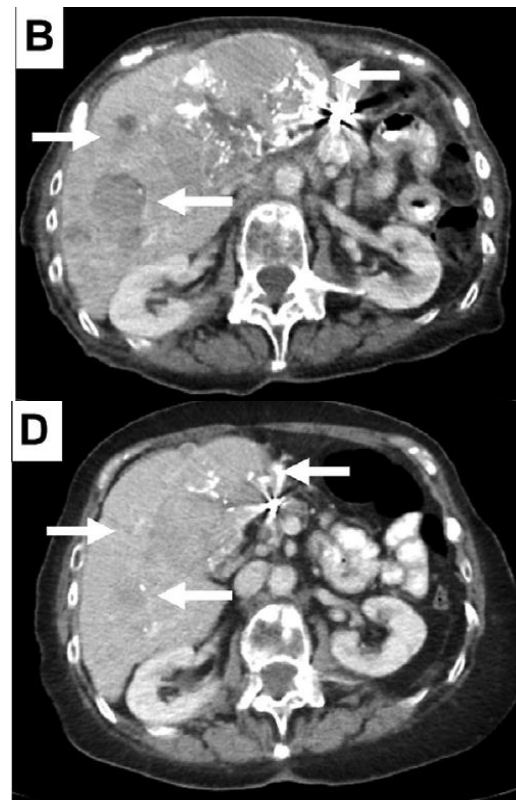
56/34

17.6 (14.4-33.1)

— BP

56/22

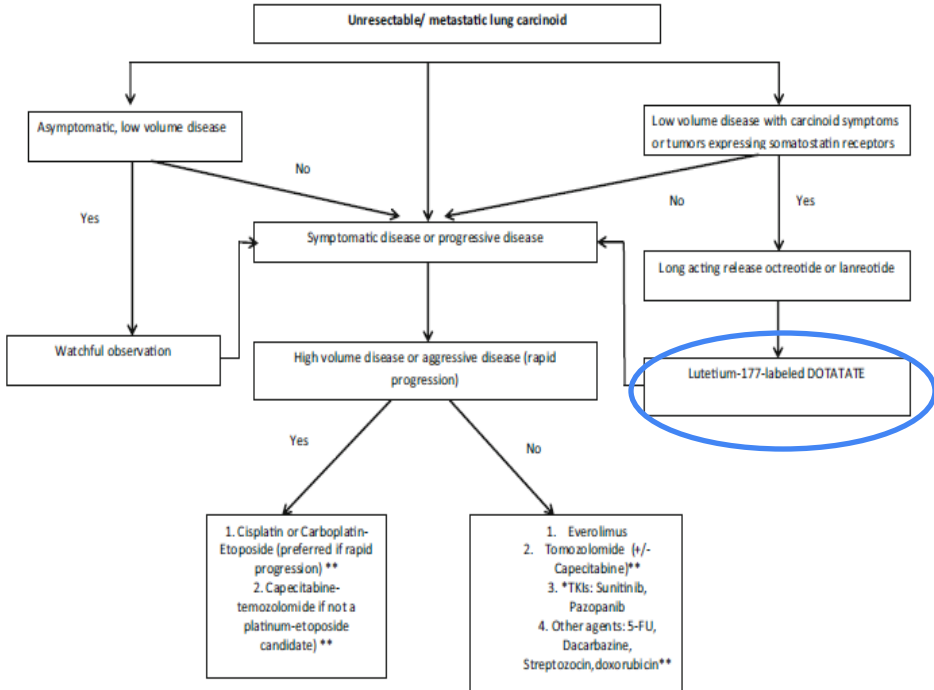
44.8 (19.9-NR)



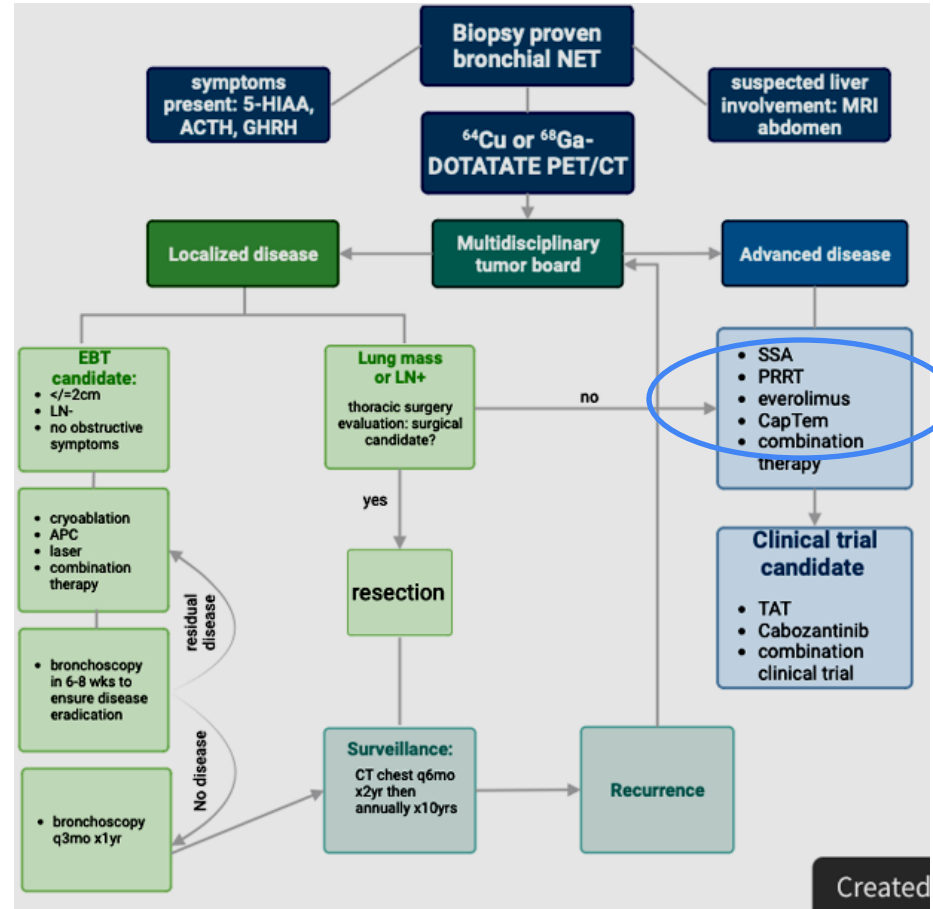
Park, H & Subramaniam R, PET Clin 2023

CARCINOIDES BRONQUIALES

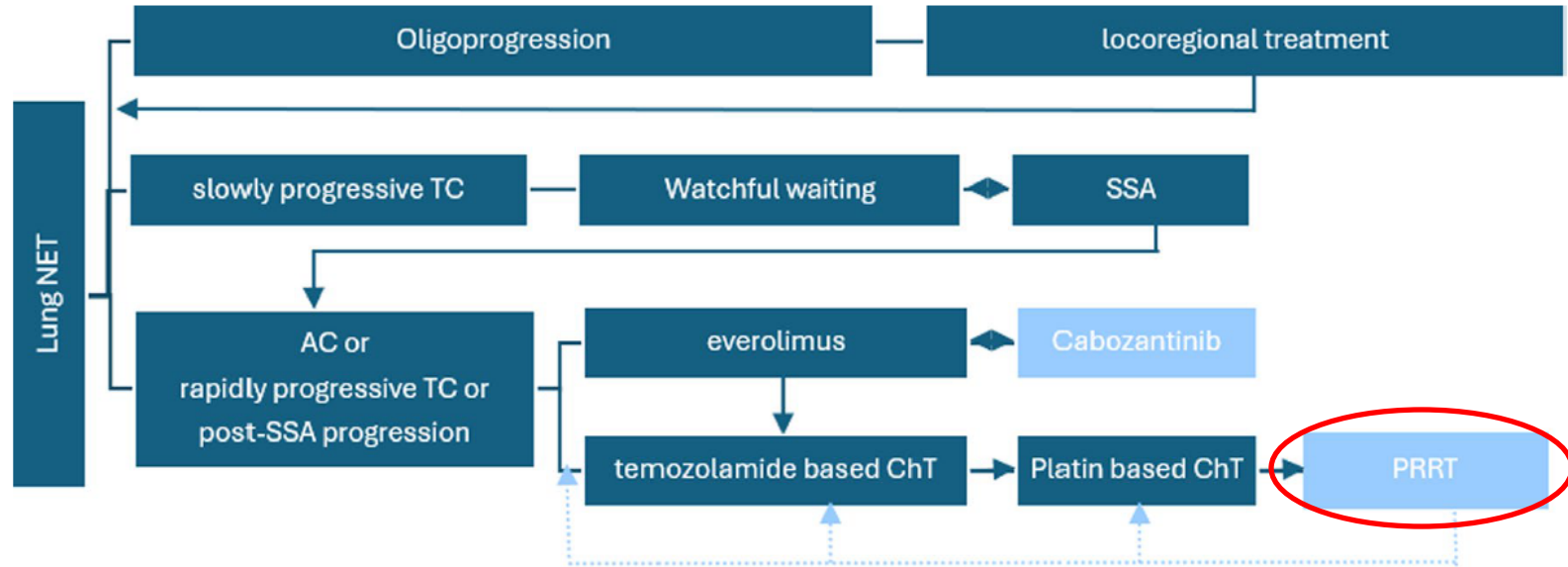
POSICIONAMIENTO TERAPEUTICO EN EL CARCINOIDE PULMONAR



Uprety D, et al. Curr. Treat. Options in Oncol. 2020



POSICIONAMIENTO EN EL TRATAMIENTO DE CARCINOIDE PULMONAR



- ✓ No hay consenso sobre el momento óptimo para utilizar PRRT en estos tumores debido a la falta de datos.
- ✓ La realización de dos trazadores 18F-FDG y 68Ga-DOTATATE permite optimizar la indicación del tratamiento.
- ✓ El uso de radionúclidos emisores de alfa, con una mayor transferencia de energía podría provocar más daño tumoral y menos a los tejidos sanos circundantes.



Theranostics potential of somatostatin receptor scintigraphy in both small and non-small cell lung cancers: a preliminary study

Mehrzad Bahtouee¹, Esmail Jafari^{2^}, Forough Salehahmadi¹, Mehdi Khazaei³, Majid Assadi^{2^}

Ther Radiol Oncol 2023

28 pacientes con carcinoma de pulmón (3 cel. Pequeñas, 25 no pequeñas= cea. escamoso, adenocarcinoma y cel. grandes)
93% (26) fueron octreoscan positivos sin relación con el tipo de tumor.

A Study of [177Lu]Lu-DOTA-TATE in Newly Diagnosed ES-SCLC Patients in Combination With Carboplatin, Etoposide and Atezolizumab

Last Update: Sep 04, 2024

A Phase Ib/II Dose Finding Study Assessing Safety and Efficacy of [177Lu]Lu-DOTA-TATE in Newly Diagnosed Extensive Stage Small Cell Lung Cancer (ES-SCLC) in Combination With Carboplatin, Etoposide, and Atezolizumab in Induction and With Atezolizumab in Maintenance Phase

ClinicalTrials.gov Identifier: [NCT05142696](https://clinicaltrials.gov/ct2/show/study/NCT05142696) Novartis Reference Number: CAAA601A42101

Search Results

Viewing 1-5 out of 5 studies

Showing results for: **Bronchial Cancer** | **Lutetium Lu 177 Dotatate**

NCT04544098

Lutathera in People With Gastroenteropancreatic (GEP), **Bronchial** or Unknown Primary Neuroendocrine **Tumors** That Have Spread to the Liver

Conditions

Liver-Dominant Metastatic Pancreatic Neuroendocrine Tumors **Neuroendocrine Tumors**

Locations

 New York, New York, United States

RECRUITING


NCT05142696


A Study of [177Lu]Lu-DOTA-TATE in Newly Diagnosed ES-SCLC Patients in Combination With Carboplatin, Etoposide and Atezolizumab

Conditions

Extensive Stage Small Cell Lung Cancer

Locations

 Washington, District of Columbia, United States

 Lexington, Kentucky, United States

 Cleveland, Ohio, United States

 Lille, France

[Show all 14 locations](#)

Personalized PRRT of Neuroendocrine Tumors (P-PRRT)

ClinicalTrials.gov ID  NCT02754297

Sponsor  CHU de Quebec-Universite Laval

Information provided by  CHU de Quebec-Universite Laval (Responsible Party)

Last Update Posted  2024-08-21

NCT06121271

Trial of Lu-177 DOTATATE (Lutathera®) in Unlicensed Indications

Conditions

Bronchial and Thymic Neuroendocrine Tumor **Medullary Thyroid Carcinoma** **Paraganglioma/ Pheochromocytoma**

Those Requiring Repeat Peptide Receptor Radionuclide Therapy

Locations

Location not provided

RECRUITING

NCT04665739


Testing Lutetium Lu 177 Dotatate in Patients With Somatostatin Receptor Positive Advanced **Bronchial** Neuroendocrine **Tumors**


Conditions


Advanced Lung Neuroendocrine Tumor **Functioning Lung Neuroendocrine Tumor**


Locally Advanced Lung Neuroendocrine Neoplasm **Lung Neuroendocrine Neoplasm** [Show 8 more conditions](#)

Locations

 Birmingham, Alabama, United States

 Beverly Hills, California, United States

 Los Angeles, California, United States

 San Francisco, California, United States

[Show all 21 locations](#)

COMPLETED WITH RESULTS


NCT03325816

Nivolumab and 177Lu-DOTA0-Tyr3-Octreotate for Patients With Extensive-Stage Small Cell Lung **Cancer**

Conditions

Small Cell Lung Cancer **Small Cell Lung Cancer Extensive Stage**

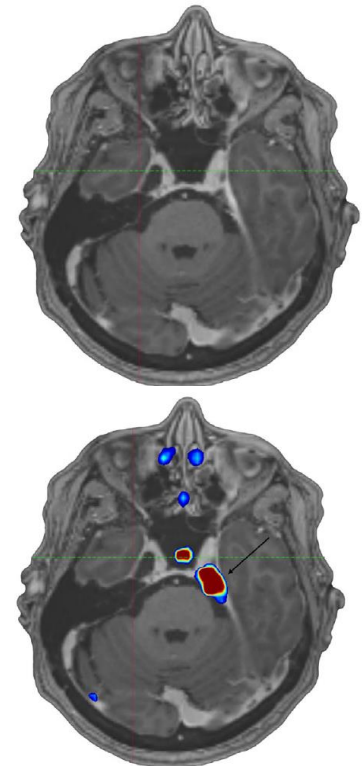
Locations

 Washington, District of Columbia, United States

 Hackensack, New Jersey, United States

MENINGIOMAS

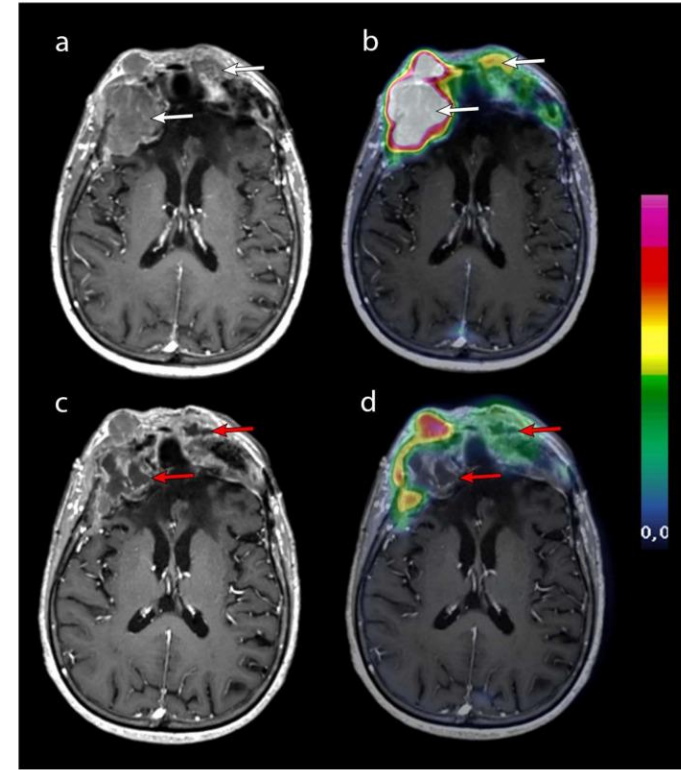
- ❑ Tumor cerebral primario más común. Casi todos **expresan receptores de somatostatina (SSTR1/SSTR2)** y las técnicas de imagen molecular pueden ayudar a **identificar con precisión la extensión del tumor**
- ❑ La OMS los clasifica en tres grados según su diferenciación; **grado I** (benigno), **grado II** (atípico) y **grado III** (anaplásico o maligno)
- ❑ La cirugía es el tratamiento de primera línea con o sin RT posterior para tumores resecables, pero se puede ofrecer radioterapia (RT) y PRRT para enfermedades irresecables, recurrentes, operadas de forma incompleta o de mayor grado.
- ❑ Varios estudios retrospectivos y metanálisis sugieren una mejora en la SLP a los 6 meses para los meningiomas de **grado I (94%)** y una OS a los 12 meses del **(88%)**, mientras para los **grados II y III** se reduce a una **SLP del 28% y OS a los 12 meses del 65%**.
- ❑ Este tratamiento no está aprobado actualmente debido a la falta de ensayos aleatorizados a gran escala y a series de pacientes limitadas en número y heterogéneas en términos de tipo y modalidad de tratamiento.



MENINGIOMAS

Autor	n	ciclos	ORR	DCR	PFS (mediana)	OS (mediana)
Seysthal 2016	20	3-4	-	50% (SD)	32,2 OMS I 7,6 OMS II 2,1 OMS III	- OMS I - OMS II - 17,2 OMS III
Müther, 2020	7	4	-	29% (SD)	6 m (42,9%)	-
Salges 2022	8	4	-	-	6 m (85,7%)	-
Minczeles 2023	15	4	40%	40% (SD)	7,8	13.6
Poled	50		40%	39.5%		

Multicenter Evaluation in Patients With Meningiomas of the Response to Treatment With ¹⁷⁷LUTetium-oxodotreotide (MELUTE). ClinicalTrials.gov ID NCT06255249



RMN y PET 68GA-DOTATOC tras 2º y 4ª ciclo de PRRT

Search Results

Viewing 1-7 out of 7 studies

Showing results for: **Meningioma** | **Lutetium Lu 177 Dotatate**

NCT06460467 **NEW**

Semi-automatic Segmentation Method for Determining 177Lu-DOTATATE Tumor Dosimetry

Conditions

Meningioma

Locations

Location not provided

RECRUITING

NCT05278208

Lutathera for Treatment of Recurrent or Progressive High-Grade CNS Tumors

Conditions

Meningioma **Anaplastic Ependymoma** **Embryonal Tumor** **High Grade Glioma** [Show 9 more conditions](#)

Locations

[Aurora, Colorado, United States](#)

[Boston, Massachusetts, United States](#)

[Chicago, Illinois, United States](#)

[Durham, North Carolina, United States](#)

[Show all 9 locations](#)

ACTIVE, NOT RECRUITING

NCT03971461

Phase II Study of 177Lu-DOTATATE Radionuclide in Adults With Progressive or High-risk **Meningioma**

Conditions

Meningioma

NCT04082520

Lutathera for the Treatment of Inoperable, Progressive **Meningioma** After External Beam Radiation Therapy

Conditions

Grade 1 Meningioma **Grade 2 Meningioma** **Grade 3 Meningioma** **Recurrent Meningioma** **Unresectable Meningioma**

Locations

[Rochester, Minnesota, United States](#)

NOT YET RECRUITING

NCT06326190

177Lu-DOTATATE for Recurrent **Meningioma**

Conditions

Recurrent Meningioma

Locations

Location not provided

NOT YET RECRUITING

NCT06126588

Combination of Everolimus and 177Lu-DOTATATE in the Treatment of Grades 2 and 3 Refractory **Meningioma**: a Phase IIb Clinical Trial

Conditions

Meningioma

NCT05537675

Semi-automated Segmentation Methods of SSTR PET for Dosimetry Prediction

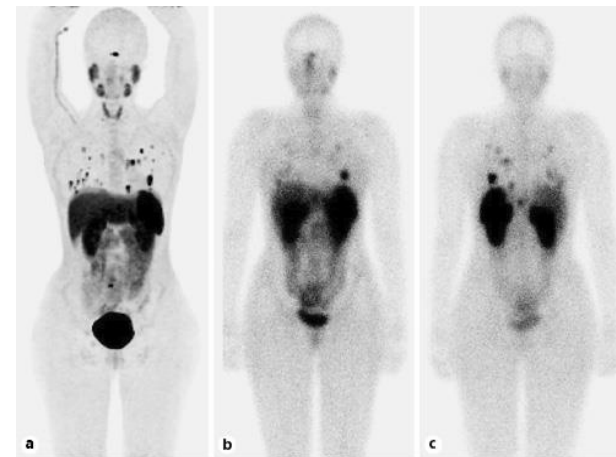
Conditions

Refractory Meningioma

Locations

FEOCROMOCITOMA/PARAGANGLIOMA

- ❑ Existen datos de **127 pacientes**, la mayoría afecta de paragangliomas (84% vs. 15%) y casi todos habían recibido cirugía previa y tenían enfermedad metastásica al inicio. La mutación SHDB estaba presente en casi la mitad de los casos.
- ❑ En general, se administraron cuatro ciclos de tratamiento con [177Lu]Lu-DOTA-TATE (5,55–7,4 GBq por ciclo) Se encontraron **respuestas parciales entre el 7-25%, pero no se confirmó ninguna respuesta completa**. Las DCR (CR+PR+SD) oscilaron entre el 67-100 %.
- ❑ La mediana de **PFS** fue de **29** (rango 6,7-138 meses) y la **mediana de OS 49,2** (8,2-139) meses aunque en otros estudios tras seguimientos médicos (26-84 meses) no fue alcanzada.
- ❑ La **crisis adrenérgica** es una complicación temprana e infrecuente en los PPGL sintomáticos tratados con [177Lu]Lu-DOTATATE. Su prevención y tratamiento mediante **bloqueo adrenérgico combinado** es similar al utilizado antes de la cirugía suprarrenal. El tratamiento mejora la calidad de vida en tumores con secreción activa de catecolaminas.
- ❑ Riesgo de mielodisplasia y mayor tasa de respuestas que el de I131-MIBG .
- ❑ Recomendado por la **NCCN 2019** y **ESMO 2020** para PPGL SSTR-positivo con metástasis a distancia y para PPGL avanzado (después de la progresión con el tratamiento estándar o para aquellos con una carga tumoral alta).



Mujer con mutación SDHB con metástasis de PGL en cabeza y cuello tratada con 177-Lu-DOTATATE. Mak Y, et al. Neuroendocrinology. 2019

FEOCROMOCITOMA/PARAGANGLIOMA

AUTOR	n	Mediana seguimiento	ORR	DCR (CR+PR+SD)	PFS	OS
Van Essen, 2016	12	13 (4-30)	8%	67%	-	-
Pinato, 2016	4	(26-84)	25%	75%	36,4	53
Vyakaranam, 2019	22	32(8-139)	9%	100%	21,6	49,6
Zandee, 2019	30	52,5(7-155)	23%	90%	30	n.r
Jaiswal, 2020	14	(11-62)	7%	86%	n.r	n.r
Roll, 2020	6	39(16-64)	0%	100%	-	-
Parghane, 2021	9	40	11%	67%	63% a 3 ^a	65% a 3a
Rubino, 2024	30	107(35-144)	23%	86%	68% a 5a 53% a 10a	75% a 5a 59% a 10a
Pooled	127	47	13%	84%	29	49,2

Van Essen M, J Nucl Med 2006; Pinato DJ, Med Oncol 2016; Vyakaranam, A.R. et al. Cancers 2019, Zandee, WT. Et al. Eur J Endocrinol 2019; Jaiswal SK et al. Endocrin Connect 2020; Roll W, et al. Word Surg 2020; Parghane RV, et al. Ann Nucl Med 2021; Rubino, M. et al. Endocrine 84, 2024

FEOCROMOCITOMA/PARAGANGLIOMA

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Zandee, 2019	30	52,5(7-155)	23%	90%	30	n.r
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Rubino, 2024	30	107(35-144)	23%	86%	68% a 5a 53% a 10a	75% a 5a 59% a 10a
Pooled	127	47	13%	84%	29	49,2

— PPGL

31/15

30.6 (14.4-NR)

— PPGL

31/10

NR (15.1-NR)

Van Essen M, J Nucl Med 2006; Pinato DJ, Med Oncol 2016; Vyakaranam, A.R. et al. Cancers 2019, Zandee, WT. Et al. Eur J Endocrinol 2019; Jaiswal SK et al. Endocrin Connect 2020; Roll W, et al. Word Surg 2020; Parghane RV, et al. Ann Nucl Med 2021; Rubino, M. et al. Endocrine 84, 2024



Article

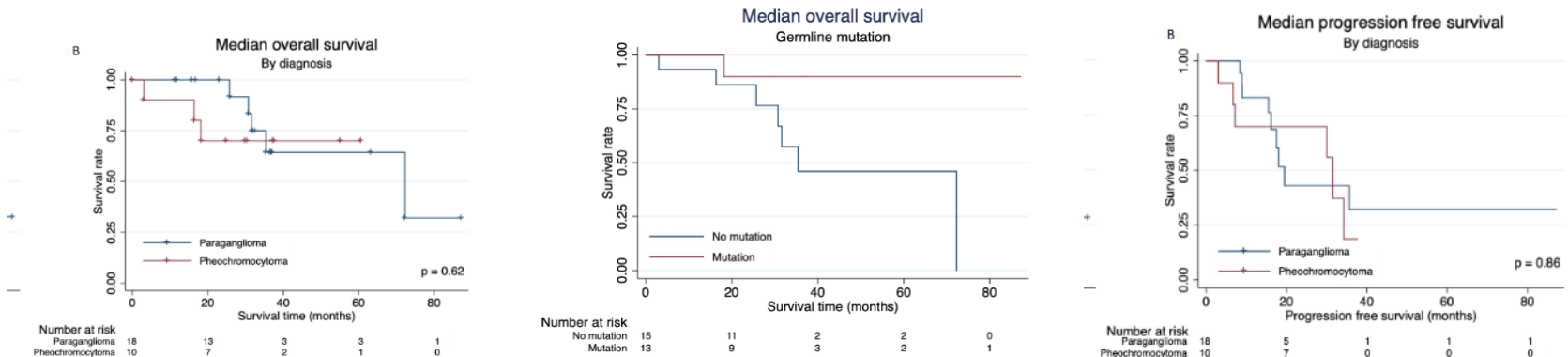
Effects of Peptide Receptor Radiotherapy in Patients with Advanced Paraganglioma and Pheochromocytoma: A Nation-Wide Cohort Study

Cancers 2024, 16, 1349.

Linda Skibsted Kornerup ^{1,†}, Mikkel Andreassen ^{2,*,†}, Ulrich Knigge ^{2,3}, Anne Kirstine Arveschoug ⁴, Per Løgstrup Poulsen ⁵, Andreas Kjær ⁶, Peter Sandor Oturai ⁶, Henning Grønbaek ^{1,7} and Gitte Dam ¹

(n = 28) treated with PPRT (¹⁷⁷Lu-Dotatate or ⁹⁰Y-Dotatate) in Denmark, we show a median overall survival of 72 and a median progression-free survival of 30 months with low toxicity.

- Median OS was 72 months, and 5-year survival was 65% with no difference between pheochromocytoma and paraganglioma.
- For patients who previously received systemic treatment, the median PFS was 19 months, compared with 32 months for patients with no previous systemic treatment (p = 0.083).



Search Results

Viewing 1-6 out of 6 studies

Showing results for: **Paraganglioma | Lutetium Lu 177 Dotatate**

NCT04166842

Radioactive Drug (177Lu-DOTATATE) for the Treatment of Locally Advanced, Metastatic, or Unresectable Rare Endocrine Cancers

Conditions

Locally Advanced Paraganglioma **Locally Advanced Adrenal Gland Pheochromocytoma** **Metastatic Paraganglioma**
Metastatic Adrenal Gland Pheochromocytoma [Show 10 more conditions](#)

Locations

Houston, Texas, United States

ACTIVE, NOT RECRUITING

NCT04711188

Study to Evaluate Safety and Dosimetry of Lutathera in Adolescent Patients With GEP-NETs and PGLs

Conditions

Paraganglioma **Gastroenteropancreatic Neuroendocrine Tumors** **Pheochromocytoma**

Locations

Lexington, Kentucky, United States **Cincinnati, Ohio, United States**
Philadelphia, Pennsylvania, United States **Lyons, France**

[Show all 2 locations](#)

NOT YET RECRUITING

NCT05121271

Trial of Lu-177 DOTATATE (Lutathera®) in Unlicensed Indications

Conditions

Paraganglioma **Pheochromocytoma** **bronchial and Olfactory Neuroendocrine Tumour** **Mucillary Thyroid Carcinoma**
Thyroid Requiring Resect Peptide Receptor Radionuclide Therapy

NCT03923257

Dosimetry Guided PRRT With 177Lu-DOTATATE in Children and Adolescents

Conditions

Paraganglioma **Neuroendocrine Tumors** **Pheochromocytoma**

Locations

Iowa City, Iowa, United States

UNKNOWN STATUS

NCT04029428

Peptide Receptor Radionuclide Therapy in the Treatment of Advanced, Non-resectable and/or Symptomatic Tumors With SSTR Overexpression

Conditions

Neuroendocrine Tumors

Locations

Warszawa, Poland

RECRUITING

NCT03206060

Lu-177-DOTATATE (Lutathera) in Therapy of Inoperable Pheochromocytoma/
Paraganglioma

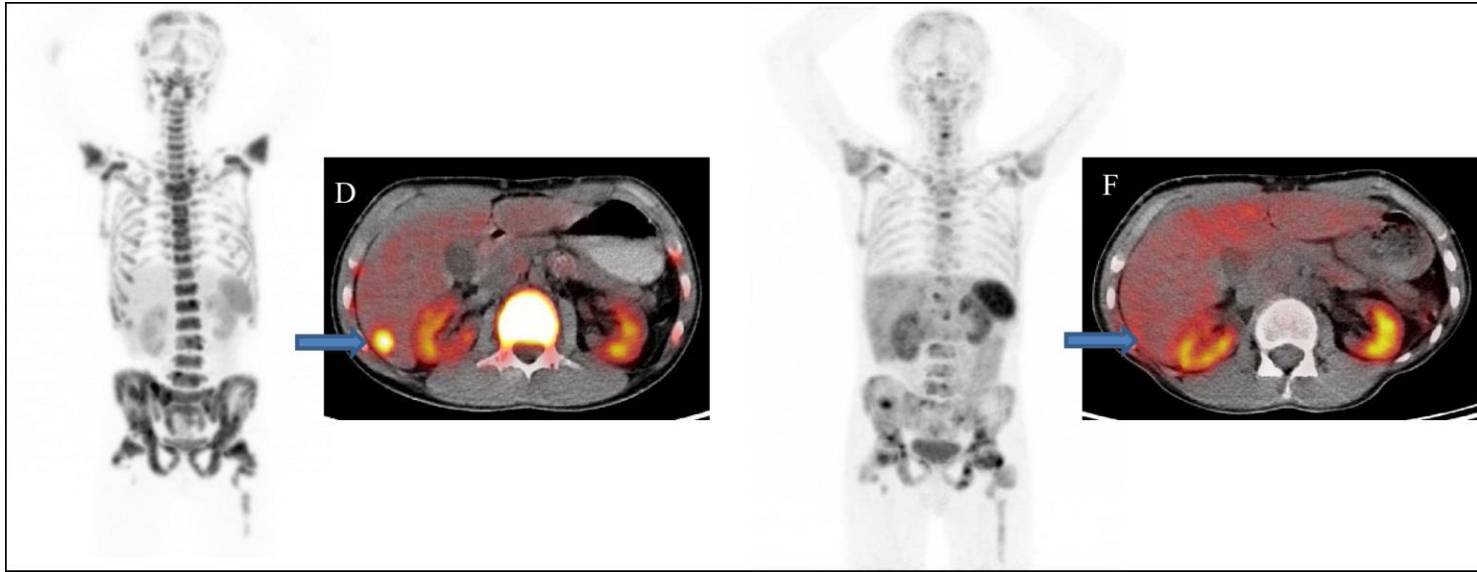
Conditions

Paraganglioma **Neuroendocrine Neoplasms** **Neuroendocrine Tumors** **Pheochromocytoma**

Locations

San Francisco, California, United States **Bethesda, Maryland, United States**
Philadelphia, Pennsylvania, United States

NEUROBLASTOMA



Fathpour et al. trataron a cinco pacientes pediátricos afectados por neuroblastoma metastásico recidivante o refractario a ^{131}I -MIBG con ^{177}Lu -DOTATATE obteniendo 2 CR, 1 PR y 2 PD con una supervivencia global de 14,5 meses



Search Results

Viewing 1-2 out of 2 studies

Showing results for: **Neuroblastoma Recurrent** | **Lutetium Lu 177 Dotatate**

● RECRUITING

NCT04903899

177Lutetium-DOTATATE in Children With Primary Refractory or Relapsed High-risk **Neuroblastoma**

Conditions

Neuroblastoma

Neuroblastoma Recurrent

Locations

📍 Copenhagen, Denmark

📍 Utrecht, Netherlands

📍 Vilnius, Lithuania

📍 Oslo, Norway

[Show all 5 locations](#)

● RECRUITING

NCT03966651

A Clinical Study Evaluating the Safety of Peptide Receptor Radionuclide Therapy (PRRT) With 177Lu-DOTA0-Tyr3-Octreotate in Children With Refractory or **Recurrent Neuroblastoma** Expressing Somatostatin Receptors.

Conditions

Neuroblastoma

Locations

📍 Lille, France

📍 Toulouse, France (2)

📍 Lyon, France

CARCINOMA MEDULAR DE TIROIDES

Revisión sistemática CMT tratados con ¹⁷⁷Lu-SSA y ⁹⁰Y-SSA (Grossrubatscher E, et al. J Clin Med 2020. n= 117)

Authors, Year	Subjects Suitable for Evaluative n	Response Criteria	PD n (%)	SD n (%)	PR n (%)	CR n (%)	Subjects Suitable for Evaluative n	Response Criteria (Calcitonin, CT)	Response	PFS Months	OS Months	Discontinuation n (%)	Grade III/IV Nephrotoxicity n (%)	Grade III/IV Haemotoxicity n (%)
Otte et al., 1999 [21]	2	NS	0 (0%)	2 (100%)	0 (0%)	0 (0%)	0	-	-	NS	NS	0 (0%)	0 (0%)	0 (0%)
Waldherr et al., 2001 [22]	12	WHO	7 (58%)	5 (42%)	0 (0%)	0 (0%)	0	-	-	NS (TTP: mean 8, median 10, range 3-14)	NS	0 (0%)	0 (0%)	NS
Paganelli et al., 2001 [23]	3	WHO	0 (0%)	3 (100%)	0 (0%)	0 (0%)	0	-	-	NS	NS	0 (0%)	0 (0%)	NS
Bodei et al., 2003 [24]	7	WHO	2 (29%)	3 (43%)	1 (14%)	1 (14%)	0	-	-	NS	NS	0 (0%)	0 (0%)	7 (88%)
Bodei et al., 2004 [25]	21	SWOG	7 (33%)	12 (57%)	0 (0%)	2 (10%)	21	PD (increase ≥ 25% in basal value) SD (none of the others) PR (decrease ≥ 50% in basal value) CR (<15 pg/mL)	12 (57%) 3 (14%) 5 (24%) 1 (5%)	NS	NS	0 (0%)	NS	1 (5%)
Gao et al., 2004 [26]	1	WHO	0 (0%)	1 (100%)	0 (0%)	0 (0%)	1	Pre-therapy and Post-therapy values	10,461 pg/mL; 3414 pg/mL	NS (TTP: 6)	NS	0 (0%)	0 (0%)	0 (0%)
Iten et al., 2007 [27]	0	-	-	-	-	-	31	Post-PRRT Prolongation of CT Doubling Time (≥100%)	Response = 18/31 (58%)	NS	16 (median) 1-107 (range)	2 (6%): kidney toxicity	1 (3%)	1 (3%)
Budiawan et al., 2013 [28]	0	-	-	-	-	-	0	-	-	NS	NS	0 (0%)	0 (0%)	0 (0%)
Vaisman et al., 2015 [29]	7	RECIST 1.1	1 (14%)	3 (43%)	3 (43%)	0 (0%)	0	-	-	NS	NS	0 (0%)	0 (0%)	0 (0%)
Lapa et al., 2015 [30]	4	RECIST 1.1 "in most cases"	4 (100%)	0 (0%)	0 (0%)	0 (0%)	0	-	-	NS	NS	NS	NS	NS
Salavati et al., 2016 [31]	0	-	-	-	-	-	0	-	-	NS	24 in PD (median) 36 in SD (median) 72 in PR (median)	NS	NS	NS
Beukhof et al., 2019 [32]	10	RECIST 1.1	6 (60%)	4 (40%)	0 (0%)	0 (0%)	0	-	-	8 (median) 4-144 (range)	14 (median) 5-144 (range)	0 (0%)	0 (0%)	0 (0%)
Parghane et al., 2020 [33]	43	RECIST 1.1	16 (37%)	25 (58%)	2 (5%)	0 (0%)	43	PD (increase ≥ 30% in basal value) SD (none of the others) PR (decrease ≥ 50% in basal value) CR (<15 pg/mL)	21 (49%) 4 (9%) 13 (30%) 5 (12%)	24 (median)	26 (median)	0 (0%)	0 (0%)	0 (0%)
Satapathy et al., 2020 [34]	7	RECIST 1.1	1 (14%)	6 (86%)	0 (0%)	0 (0%)	5	Increase ≥ 25% in basal value None of the others Decrease ≥ 50% in basal value CT < 15 pg/mL	2 (40%) 2 (40%) (20%) 0 (0%)	NS	NS	0 (0%)	0 (0%)	0 (0%)

CARCINOMA MEDULAR DE TIROIDES

Revisión sistemática CMT tratados con ¹⁷⁷Lu-SSA y ⁹⁰Y-SSA (Grossrubatscher E, et al. J Clin Med 2020. n= 117)

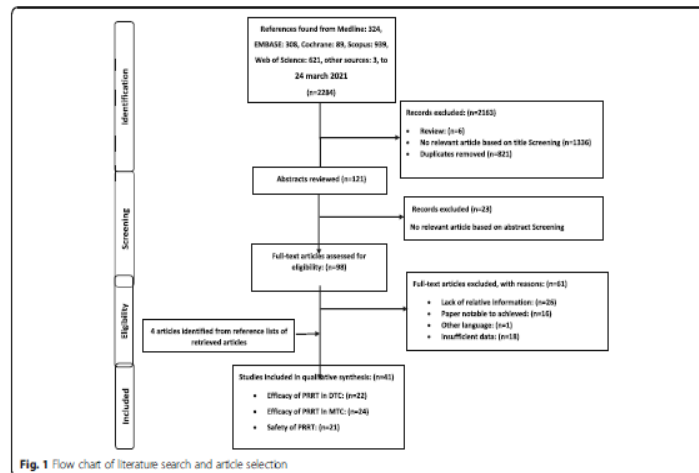
Authors, Year	Subjects Suitable for Evaluative n	Response Criteria	PD n (%)	SD n (%)	PR n (%)	CR n (%)	Subjects Suitable for Evaluative n	Response Criteria (Calcitonin, CT)	Response	PFS Months	OS Months	Discontinuation n (%)	Grade III/IV Nephrotoxicity n (%)	Grade III/IV Haemotoxicity n (%)
Otte et al., 1999 [21]	2	NS	0 (0%)	2 (100%)	0 (0%)	0 (0%)	0	-	-	NS	NS	0 (0%)	0 (0%)	0 (0%)
Waldherr et al., 2001 [22]	12	WHO	7 (58%)	5 (42%)	0 (0%)	0 (0%)	0	-	-	NS (TTP: mean 8, median 10, range 3-14)	NS	0 (0%)	0 (0%)	NS
Paganelli et al., 2001 [23]	3	WHO	0 (0%)	3 (100%)	0 (0%)	0 (0%)	0	-	-	NS	NS	0 (0%)	0 (0%)	NS
Bodei et al., 2003 [24]	7	WHO	2 (29%)	3 (43%)	1 (14%)	1 (14%)	0	-	-	NS	NS	0 (0%)	0 (0%)	7 (88%)
Bodei et al., 2004 [25]	21	SWOG	7 (33%)	12 (57%)	0 (0%)	2 (10%)	21	PD (increase ≥ 25% in basal value) SD (none of the others)	12 (57%) 3 (14%)	NS	NS	0 (0%)	NS	1 (5%)
Gao et al., 2004 [26]	1	WHO	n	CR	PR	SD	PD	ORR	DCR			0 (0%)	0 (0%)	0 (0%)
Iten et al., 2007 [27]	0	-										%: kidney toxicity	1 (3%)	1 (3%)
Budiawan et al., 2013 [28]	0	-										0 (0%)	0 (0%)	0 (0%)
Vaisman et al., 2015 [29]	7	RECIST	117	26%	5,1%	54,7%	37,6%	31,1%	62,4%			0 (0%)	0 (0%)	0 (0%)
Lapa et al., 2015 [30]	4	RECIST "in n case"										NS	NS	NS
Salavati et al., 2016 [31]	0	-	-	-	-	-	0	-	-	NS	(median) 36 in SD (median) 72 in PR (median)	NS	NS	NS
Beukhof et al., 2019 [32]	10	RECIST 1.1	6 (60%)	4 (40%)	0 (0%)	0 (0%)	0	-	-	8 (median) 4-144 (range)	14 (median) 5-144 (range)	0 (0%)	0 (0%)	0 (0%)
Parghane et al., 2020 [33]	43	RECIST 1.1	16 (37%)	25 (58%)	2 (5%)	0 (0%)	43	PD (increase ≥ 30% in basal value) SD (none of the others) PR (decrease ≥ 50% in basal value) CR (<15 pg/mL)	21 (49%) 4 (9%) 13 (30%) 5 (12%)	24 (median)	26 (median)	0 (0%)	0 (0%)	0 (0%)
Satapathy et al., 2020 [34]	7	RECIST 1.1	1 (14%)	6 (86%)	0 (0%)	0 (0%)	5	Increase ≥ 25% in basal value None of the others Decrease ≥ 50% in basal value CT < 15 pg/mL	2 (40%) 2 (40%) (20%) 0 (0%)	NS	NS	0 (0%)	0 (0%)	0 (0%)

CARCINOMA MEDULAR DE TIROIDES

Efficacy and safety of peptide receptor radionuclide therapy in advanced radioiodine-refractory differentiated thyroid cancer and metastatic medullary thyroid cancer: a systematic review

BMC Cancer (2021) 21:579

Zohreh Maghsoomi¹, Zahra Emami¹, Ramin Malboosbaf¹, Mojtaba Malek² and Mohammad E. Khamseh^{1*}



- ❑ **220 pacientes** con CMT metastásico fueron tratados con PRRT (Se trató a 69 pacientes con 90Y-DOTATOC, 88 pacientes con 177Lu-DOTATATE y 12 pacientes con un agente basado en 111In).
- ❑ **Respuesta bioquímica:** 7/145 casos con respuesta completa (RC), 47/145 casos de RP, 20/145 casos con SD y 71/145 casos de PD.
- ❑ **Respuesta radiológica:** 4/134 de CR, 9/134 casos de PR, 75/134 casos de SD y 46/134 casos de PD.
- ❑ En conjunto, en los pacientes con MTC metastásico, se observaron respuestas bioquímicas y objetivas en el 37,2 y el 10,6 % de los pacientes, respectivamente.

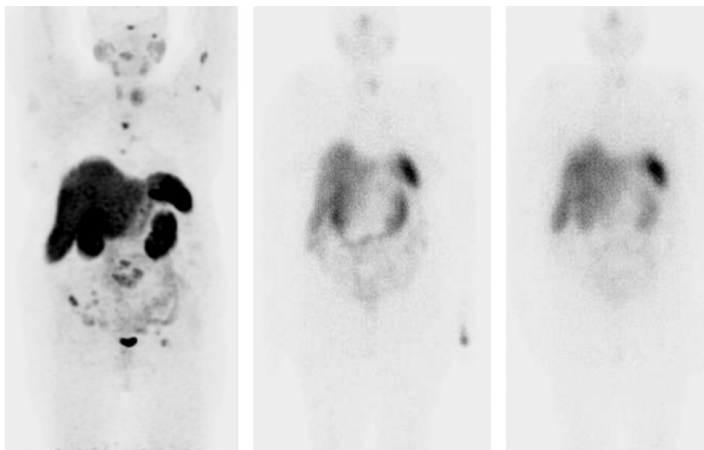
CARCINOMA MEDULAR DE TIROIDES

Efficacy and safety of peptide receptor radionuclide therapy in advanced radioiodine-refractory differentiated thyroid cancer and metastatic medullary thyroid cancer: a systematic review



Zohreh Maghsoomi¹, Zahra Emami¹, Ramin Malboosbat¹, Mojtaba Malek² and Mohammad E. Khamseh^{1*}

BMC Cancer 2021



n	CR	PR	SD	PD	ORR	DCR
117	26%	5,1%	54,7%	37,6%	31,1%	62,4%

	177Lu-DOTATATE N=74	90Y-DOTATOC N=55-38
RESPUESTA BIOQUIMICA	CR 7% PR 35% SD 19% PD 39%	CR 2% PR 27% SD 1% PD 60%
RESPUESTA RADIOLOGICA	CR 5% PR 12% SD 42% PD 31%	CR 5,2% PR 0% SD 54,8% PD 40%
ORR Bioq/Rx	42/17%	29/5,2%
DCR Bioq/Rx	61/59%	30/60%



Search Results

Viewing 1-2 out of 2 studies

Showing results for: **Medullary Thyroid Cancer** | Other terms: **Medullary Carcinoma** | **Lutetium Lu 177 Dotatate**

WITHDRAWN

NCT04106843

Radioactive Drug (177Lu-DOTATATE) for the Treatment of Locally Advanced, Metastatic, or Unresectable Rare Endocrine **Cancers**

Conditions

Locally Advanced Adrenal Gland Pheochromocytoma

Locally Advanced Paranglioma

Metastatic Adrenal Gland Pheochromocytoma

Metastatic Paranglioma

Metastatic Parathyroid Gland Carcinoma

Pituitary Gland Carcinoma

Somatostatin Receptor Positive

Stage III Thyroid Gland Medullary Carcinoma AJCC v8

Stage IV Thyroid Gland Medullary Carcinoma AJCC v8

Stage IVA Thyroid Gland Medullary Carcinoma AJCC v8

Stage IVB Thyroid Gland Medullary Carcinoma AJCC v8

Stage IVC Thyroid Gland Medullary Carcinoma AJCC v8

Unresectable Adrenal Gland Pheochromocytoma

Unresectable Paranglioma

[Show fewer conditions](#)

Locations

Houston, Texas, United States

NOT YET RECRUITING

NCT06121271

Trial of Lu-177 DOTATATE (Lutathera®) in Unlicensed Indications

Conditions

Medullary Thyroid Carcinoma

Bronchial and Thymic Neuroendocrine Tumour

Paranglioma/ Phaeochromocytoma

Those Requiring Repeat Peptide Receptor Radionuclide Therapy

Locations

Search Results

Viewing 1-10 out of 91 studies

Showing results for: **Other terms: Lutathera | Lutetium Lu 177 Dotatate**

Card View

Table View

Sort studies by

Relevance

Focus Your Search

(all filters optional)

Hide

Condition/disease

Other terms

Intervention/treatment

None Selected



RECRUITING

NCT06395402

177Lu-DOTATATE Modified Delivery Based on Individualized Dosimetry

Conditions

Neuroendocrine Tumor Grade 1

Neuroendocrine Tumor Grade 2

Neuroendocrine Tumors

Locations

Iowa City, Iowa, United States

n= 22/91

- | | |
|---------------------------------|---|
| ✓ Bronquial | 5 |
| ✓ Meningioma | 7 |
| ✓ Paraganglioma | 6 |
| ✓ Neuroblastoma | 2 |
| ✓ Carcinoma Medular de Tiroides | 2 |

- ❖ Predominio de lesiones “diferenciadas” versus “indiferenciadas” (PET-FDG)
- ❖ Intensidad de captación (≥ 3) global y de las lesiones (dosimetría lesional)
- ❖ Análisis de la expresión y funcionalidad de receptores SSTRs en la pieza quirúrgica
- ❖ Elección del momento de inicio de la terapia
- ❖ Secuenciación de las terapias disponibles
- ❖ Re-tratamiento como opción de rescate
- ❖ Combinación de terapias en las lesiones más agresivas