Apollomedics
SUPER SPECIALITY HOSPITALS

DEPARTMENT OF NUCLEAR MEDICINE AND PET-CT

NAME	ARJUN PRASAD GIRI	AGE/SEX	64/M	DATE	19.04.2022
UHID	MILL.0000249451	REF BY	DR. HARSHVARDHAN ATREYA		

^{18}F-PSMA WHOLE BODY PET-CT STUDY

Clinical details: K/C/O carcinoma prostate, Gleason score (5+ 4 = 9). Last PSMA PET - CT dated (26.11.2021) was suggestive of viable primary and metastatic disease. Post PET- CT received 6 cycles of chemotherapy.

Indication: Restaging

PROCEDURE:

Whole body PET-CT (Vertex to mid-thigh) images were acquired 45 minutes after I.V. administration of 18F-PSMA (13.4mCi) on a PET-CT scanner. Images were reconstructed to obtain transaxial, coronal and sagittal views. I.V contrast was given.

PET-CT scan findings:

Physiological distribution of the radiotracer:

Normal physiological radiotracer activity of 18F-PSMA is seen in the lacrimal and salivary glands, liver, spleen, bowel, kidneys.

Head and Neck:

Visualized portion of the brain appears normal. (All brain lesions may not be apparent on PET-CT and MRI may be performed, if clinically indicated). Soft tissue of the neck appears normal with no abnormal PSMA activity. No significant PSMA avid lymphadenopathy in the cervical region.

Thorax:

- *PSMA avid subcentimetric sized mediastinal lymph nodes are noted (SUVmax- 3.09) - Likely Benign.*

Lungs, large airways, pleura, heart, great vessels and esophagus appear normal on CT.

Abdomen & Pelvis:

- **PSMA avid heterogeneously contrast enhancing lesion (Measuring approximately 4.6 AP x 4.4 TR x 4.0 CC cms, SUVmax- 9.57) is noted involving entire prostate gland from apex to base , lesion is infiltrating left seminal vesical, anteriorly lesion is abutting with neck of urinary bladder, posteriorly lesion is abutting with anal canal.**
- **PSMA avid subcentimetric sized right common iliac and left obturator lymph nodes are noted (Highest SUVmax- 3.75).**
- **PSMA avid subcentimetric sized nodules are noted in perirectal fat (Highest SUVmax- 3.94).**

Physiological PSMA distribution is noted in the liver, spleen, gastrointestinal tract and kidneys. Stomach, adrenals, liver, gall bladder, biliary system, pancreas, spleen, kidneys, retroperitoneum, bowel and urinary bladder shows no significant abnormality on CT. No ascites is noted.

Apollomedics
SUPER SPECIALITY HOSPITALS

DEPARTMENT OF NUCLEAR MEDICINE AND PET-CT

NAME	ARJUN PRASAD GIRI	AGE/SEX	64/M	DATE	19.04.2022
UHID	MILL.0000249451	REF BY	DR. HARSHVARDHAN ATREYA		

Musculoskeletal:

- PSMA avid sclerotic lesions are noted in almost entire appendicular and axial skeleton (SUVmax- 10.46),

Rest of the visualized bones are essentially normal.

Impression: ^{68}F-PSMA PET-CT scan findings are suggestive of -

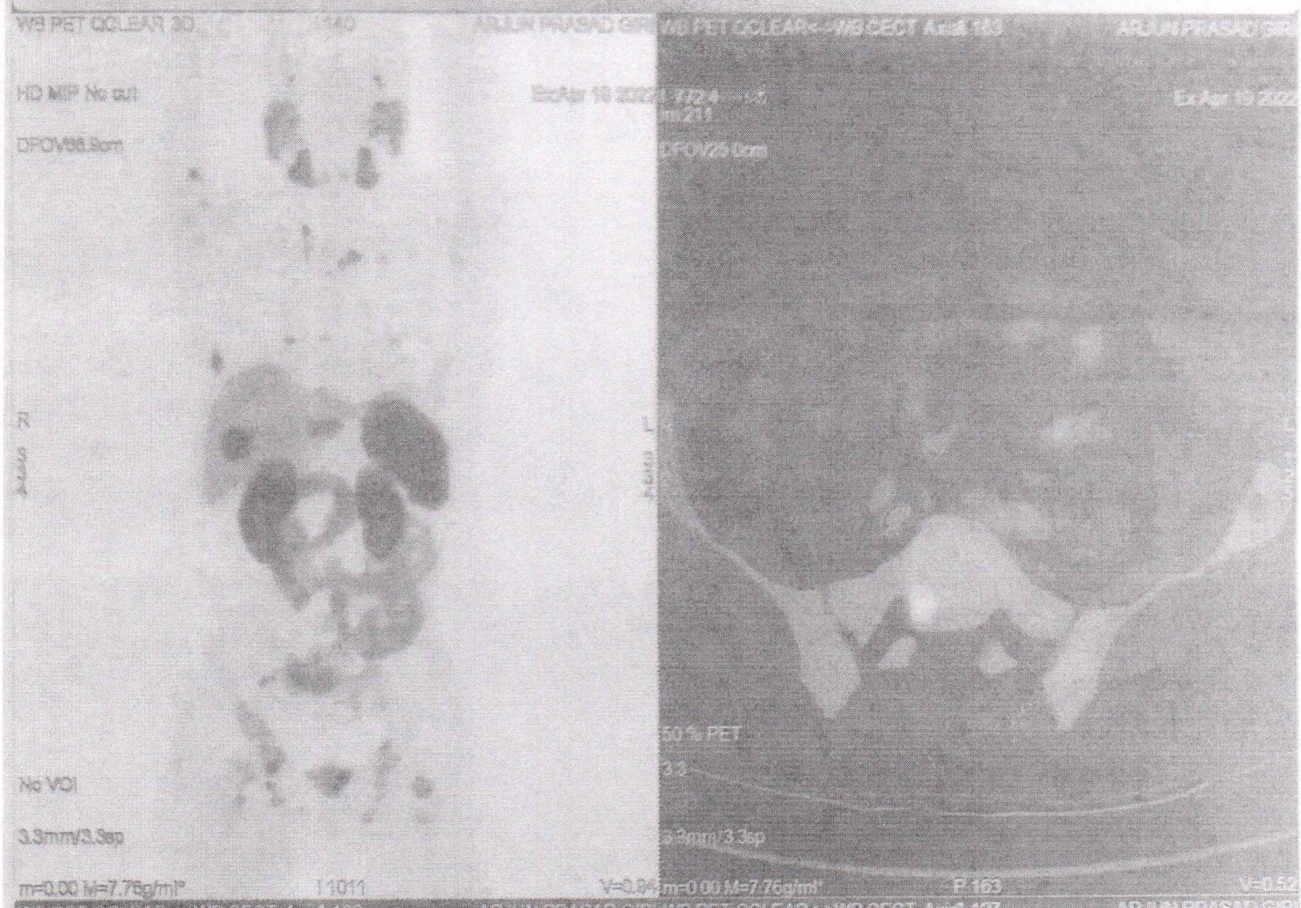
- PSMA expressing lesion involving entire prostate gland as described above is suggestive of residual primary malignancy.
- PSMA expressing metastatic perirectal nodules, right common iliac and left obturator lymphadenopathy as described above.
- PSMA expressing extensive sclerotic bony metastasis as described above.

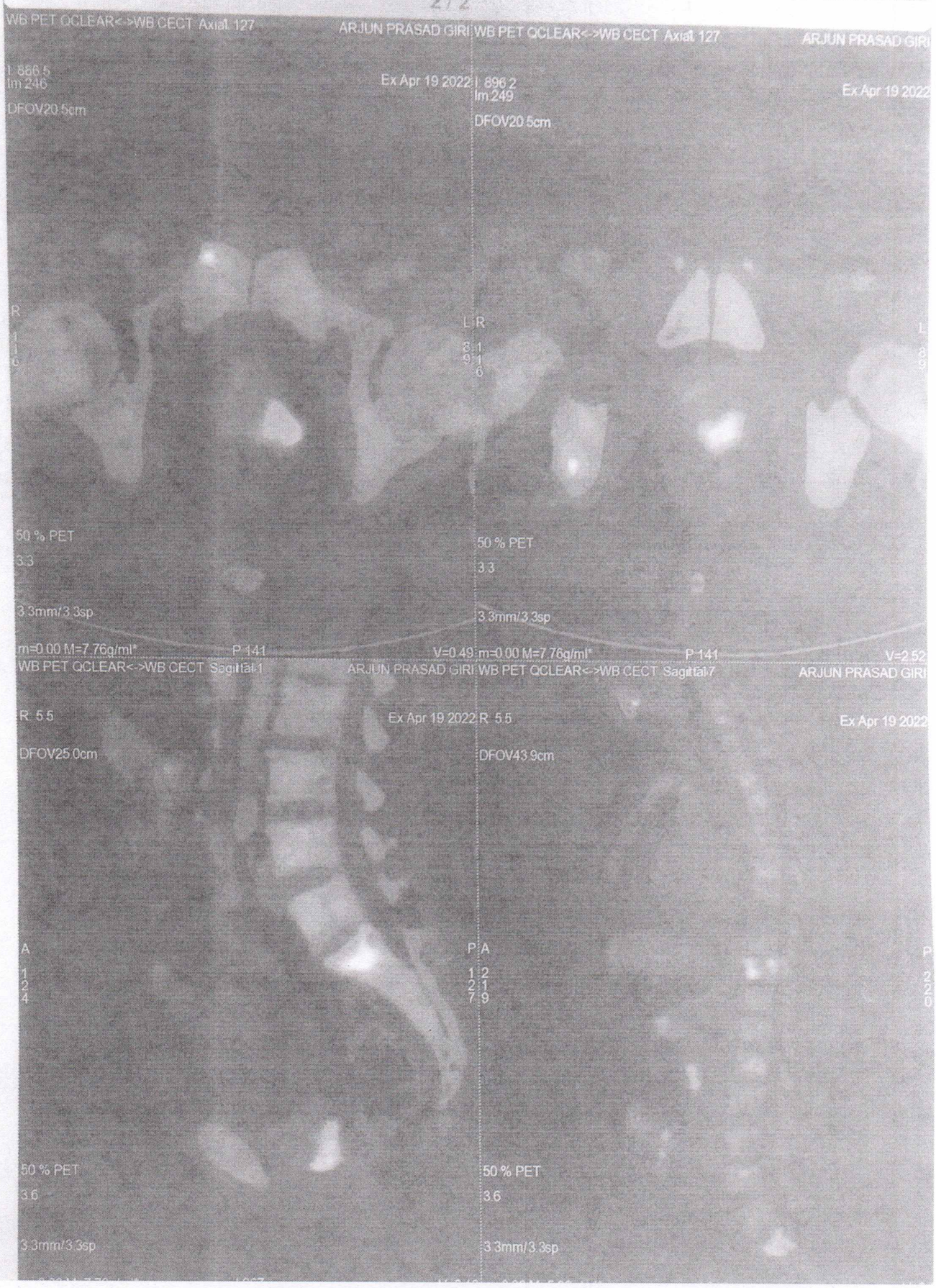
In comparison to previous *Gallium – 68 PSMA PET-CT* scan dated (26.11.2021), there is *(SUV values cannot be compared as both tracers are different)*:

- Decreased size (~ 35 %) of primary lesion in prostate gland.
- Decreased size (~ 50 %) of right common iliac and left obturator lymphadenopathy.
- Decreased size and number of perirectal nodules.
- Complete resolution of right external iliac lymph node.
- Increased sclerosis of all the bony lesions.

Overall scan findings are suggestive of good but partial response to therapy.

Dr. Narvesh Kumar
M.D. (SGPGI), PDCC (SGPGI), EX-SR SGPGI
Consultant-Nuclear Medicine & PET-CT
Phone No: 8765583930


WB PET QCLEAR 3D
HD MIP No cut
DFOV596.8cm
No VOI
3.3mm/3.3sp
WB PET QCLEAR<->WB CECT Axial 163
Ex Apr 19 2022
DFOV25.0cm
50 % PET
3.3mm/3.3sp
WB PET QCLEAR<->WB CECT Axial 127
DFOV20.5cm


WB PET QCLEAR<->WB CECT Axial 127
ARJUN PRASAD GIRI
Ex Apr 19 2022
I 886.5
Im 246
DFOV20.5cm
R
L
50 % PET
3.3
3.3mm/3.3sp
m=0.00 M=7.76g/ml*
P 141
V=0.49
WB PET QCLEAR<->WB CECT Axial 127
ARJUN PRASAD GIRI
Ex Apr 19 2022
I 896.2
Im 249
DFOV20.5cm
R
L
50 % PET
3.3
3.3mm/3.3sp
m=0.00 M=7.76g/ml*
P 141
V=2.52
WB PET QCLEAR<->WB CECT Sagittal 1
ARJUN PRASAD GIRI
Ex Apr 19 2022
R 5.5
DFOV25.0cm
A
P
50 % PET
3.6
3.3mm/3.3sp
WB PET QCLEAR<->WB CECT Sagittal 7
ARJUN PRASAD GIRI
Ex Apr 19 2022
R 5.5
DFOV43.9cm
A
P
50 % PET
3.6
3.3mm/3.3sp

CHEMBUR
20), Glamcent Premises, Opposite OLPS Church, Above IDFC First Bank,
Central Avenue Road, Chembur, Mumbai - 400071.
Monday to Friday 5 pm to 8 pm

ATTACHMENTS
Nanavati-Max Super Speciality Hospital, Vile Parle, West, Mumbai
Zen Multi Speciality Hospital, Chembur, Mumbai

DR ADWAITA GORE D.N.B. (MEDICAL ONCOLOGY) - Z002041926

Medical Oncologist | Hemato Oncologist | Bone Marrow Transplant Physician
For Appointment: 9619810041 | drgore.onco@gmail.com

Consultation Record.

Patient Details

RS/Mr	Mr Arjun Prasad Giri	Age:	65 Years	Date: 26-Jun-2023	
Reference	Dr Shraddha Giri	Sex:	Male		
Mobile	9928094433	Address:	Jaipur		
Informant	Patient has narrated the history	Weight:	73 kgs	Height: 164 cms	BSA: 1.79 sqm BMI: 27.1 kg/m2

Co-morbidities

8 years h/o	Diabetes	Metmed 1 mg OD
8 years h/o	Hypertension	Stamlo 5mg OD
	Dyslipidemia	Atorvas 10 mg OD

Other Significant History

Corneal Opacity Right eye since childhood - post chicken pox

Presenting Complaints

16-n-2021	Adenocarcinoma Prostate - mCSPC High volume disease. Completed 6 x Docetaxel completed 07/04/2022, then ABP, then rechallenged Docetaxel, now on ENZA for evaluation

Treatment Details

25/07/2021	TRUS guided biopsy done. Reports: Adenocarcinoma Poorly differentiated; Gleason score 5+4 = 9
8/12/2021	Underwent Bilateral Orchiectomy by Dr Santosh Palkar.
1st line Rx	Post 6 cycles Docetaxel LD 07/04/2022 followed by Abiraterone 1000 mg OD + Omnacortil 5 mg BD daily since May 2022
2nd line Rx	2 weekly Docetaxel x 4 doses LD 25/02/2023 - developed LRTI hence stopped.
3rd line Rx	Enzalutamide 160 mg OD started May 2023.

General Examination

ECOG PS	1	Pallor	Absent	Icterus	Absent	Edema feet	Absent	Lymph nodes	Not palpable

Local Examination

Systemic Examination

Respiratory	Clear, No foreign sounds	Cardiovascular	S1 S2 Normal, No murmur	Abdomen	Soft, no tenderness, BS
CNS	Physiological, NAD	Other			

Investigations

07-Jun-2023	CBC	Hb	12.4 gm%	TLC	7,250 /cmm	PLT	197,000 /cmm	DLC	N83 L29	Creat	0.98 mg/dl
	LFT	ALT	22 U/L	Bil	0.8 mg/dl	PBD		ALB	4.16 gm/dl	SAP	LDH
02-Jun-2023	ECHO/HO					PSA 9.24					
19-Apr-2022	PET CT scan	Decrease in prostate mass, right obturator iliac and left obturator LN, peri rectal nodules, right ext iliac nodes, increased sclerosis of all bone lesions, S/O partial response to therapy.									
01-Dec-2021	Biopsy	Adenocarcinoma Poorly differentiated, Gleason score 5 + 4 = 9									
06-Nov-2021	PSMA PET	Patchy areas of PSMA uptake in peripheral zones of prostate (35 x 18 x 42 mm) from base to apex with extension to bilateral seminal vesicles - residual disease (SUV 23.4). PsMA avid extensive skeletal metastasis (SUV 29.24). Previous scan not available for comparison.									
10-Apr-2023	PSMA PET	Partial response noted.									

Diagnosis

Metastatic Adenocarcinoma prostate Stage IV disease - CSPC - High volume. Post Bilateral Orchiectomy done 11/12/2021.
Post 6 cycles Docetaxel LD 07/04/2022. On Abiraterone + Prednisolone. Had increase in PSA in Nov 2022 and in Jan 2023 also. Received 4 dose Docetaxel 2 weekly - developed LRTI interrupting chemotherapy. Since May 2023 on ENZA.

Discussion with patient and/or relatives

Rx intent	Palliative. Symptom relief, Disease control. Low intensity therapy. Not curative.
Explained	Outcome of disease as per evaluation today. Benefits & side effects of treatment. Financial implications for treatment & supportive care.
Work up	CBC, Creatinine, LFT, PSA once in 2 months.
Treatment	Continue ENZA 160 mg OD with Zoldonat once in 4 weeks.
Follow up	After 2 months with reports.

INSTRUCTIONS TO PATIENTS:

For Appointments: +91-9619810041 (Call between 9 am to 9 pm)

Please call at least 4 - 5 days prior to your next appointment date.

Dr. Adwaita A Gore,
DNB Medical Oncology, DNB General Medicine
Consultant Medical Oncologist, Hemato Oncologist & Bone Marrow Transplant Physician
Registration No: 2002/06/1926.

Diagnostic Report

MC-5716

agilus diagnostics

PATIENT NAME : ARJUN P GIRI | **REF. DOCTOR :** DR. MEDANTA HOSPITAL

CODE/NAME & ADDRESS : C000133149 PADAM PATHOLOGY RAJA BAHDAUR PARK, PRATAPGARH,PRATAPGARH PRATAPGARH 230001 9918101000	ACCESSION NO : **0355WK003711** PATIENT ID : ARJUM161157355 CLIENT PATIENT ID: ABHA NO :	AGE/SEX : 66 Years Male DRAWN : RECEIVED : 16/11/2023 18:50:03 REPORTED : 17/11/2023 14:06:20

Test Report Status **Final**	Results	Biological Reference Interval	Units

SPECIALISED CHEMISTRY - TUMOR MARKER

PROSTATE SPECIFIC ANTIGEN, SERUM

PROSTATE SPECIFIC ANTIGEN	**61.400 High**	< or = 4.10	ng/mL
METHOD : ELECTROCHEMILUMINESCENCE IMMUNO ASSAY			

Interpretation(s)
PROSTATE SPECIFIC ANTIGEN, SERUM:- PSA is detected in the male patients with normal, benign hyperplastic and malignant prostate tissue and in patients with prostatitis.
- PSA is not detected (or detected at very low levels) in the patients without prostate tissue (because of radical prostatectomy or cystoprostatectomy) and also in the female patients.
- It a suitable marker for monitoring of patients with Prostate Cancer and it is better to be used in conjunction with other diagnostic procedures.
- Serial PSA levels can help determine the success of prostatectomy and the need for further treatment, such as radiation, endocrine or chemotherapy and useful in detecting residual disease and early recurrence of tumor.
- Elevated levels of PSA can be also observed in the patients with non-malignant diseases like Prostatitis and Benign Prostatic Hyperplasia.
- Specimens for total PSA assay should be obtained before biopsy, prostatectomy or prostatic massage, since manipulation of the prostate gland may lead to elevated PSA (false positive) levels persisting up to 3 weeks.
- As per American urological guidelines, PSA screening is recommended for early detection of Prostate cancer above the age of 40 years. Following Age specific reference range can be used as a guide lines.
- Measurement of total PSA alone may not clearly distinguish between benign prostatic hyperplasia (BPH) from cancer, this is especially true for the total PSA values between 4-10 ng/mL.
- Total PSA values determined on patient samples by different testing procedures cannot be directly compared with one another and could be the cause of erroneous medical interpretations. Recommended follow up on same platform as patient result can vary due to differences in assay method and reagent specificity.

References:-
1. Burtis CA, Ashwood ER, Bruns DE. Teitz textbook of clinical chemistry and Molecular Diagnostics. 4th edition.
2. Williamson MA, Snyder LM. Wallach's interpretation of diagnostic tests. 9th edition.

End Of Report

Please visit www.agilusdiagnostics.com for related Test Information for this accession

Dr.Rashmi Rasi Datta-MD,FIMSA
DMC-64289
Consultant Biochemist & Section Head

Dr. Anurag Bansal
LAB DIRECTOR

View Details View Report

Patient Ref. No. 7750000005459192

PERFORMED AT :
Agilus Diagnostics Ltd.
Reference Lab,2nd Floor, Plot No. 31,Urban Estate Electronic City,Sector-18,
Gurgaon, 122015
Haryana, India
Tel : 9111591115, Fax : CIN - U74899PB1995PLC045956