Supplementary Table 1. Review of bone superscan associated with gastric cancer

First Author	Type of Cancer and stage	Initial Presentation	Patient Age (years)	Patient Gender	Patient Race/ Country	Year of Publish	Bone Scan Findings	Findings from Other Imaging Studies
Hori K. [17]	Signet cell gastric cancer	Hypophosphatasia	65	Female	Japan	2008	Super bone scan with increased uptake in spine and pelvis	Low signal intensities on T1- and T2-weighted images in lumbar spine; no obvious abnormality
Fujita K. [18]	Recurrent gastric cancer(Adenocarcinoma)	Body pain, especially in lumbar area	55	Female	Japan	2022	Super bone scan showing increased uptake in spine, limbs, pelvis, and skull	CT and MRI showed no residual tumor after Ewing sarcoma treatment; bone marrow biopsy revealed adenocarcinoma
Das J. [19]	Poorly differentiated gastric adenocarcinoma with signet ring cell component	Loss of appetite and occasional vomiting	37	Female	Bangladesh	2020	Intense radiotracer uptake involving almost the entire axial and proximal appendicular skeleton; high bone to soft tissue radiotracer uptake ratio; kidneys and urinary bladder faintly visualized	CT scan showed diffuse involvement of all visualized bones with mixed lytic sclerotic lesions consistent with bone metastases; bilateral enlarged ovaries consistent with Krukenberg tumors
Kobayashi F. [20]	Borrmann type 4 gastric carcinoma with diffuse bone metastases	Increasing lumbago and back pain; weight loss	54	Male	Japan	1995	Abnormal findings on bone scintigram indicating a "super scan"; homogeneous and symmetric uptake in axial skeleton without renal images	Biopsy from iliac bone showed poorly differentiated adenocarcinoma; abdominal ultrasound and CT showed hepatosplenomegaly without space-occupying lesions
Tokushima K. [21]	Advanced Gastric Carcinoma (Borrmann's type 4)	Loss of appetite, lumbago, back pain, ascites	50	Male	Japan	1997	Diffuse uptake in axial skeleton (superscan)	Abdominal ultrasonography and CT: No liver metastasis detected
Taiki Sato Y. [22]	Signet-ring cell carcinoma (early gastric cancer)	Low back pain, hyperphosphatasemia	57	Male	Japan	2023	PET-CT showed abnormal uptake in the spine and pelvic bones	No primary lesion detected in upper and lower endoscopy; vertebral osteolytic mass observed on CT indicating progressive disease
Jenkins M. [23]	Gastric carcinoma, advanced (multiple lytic metastases)	Weight loss, anorexia, low back pain	50	Male	Australia	1999	Diffuse metastatic bony disease (super bone scan)	Gastroscopy confirmed gastric carcinoma; biopsy showed poorly differentiated signet ring adenocarcinoma
Pang Y. [12]	Gastric signet-ring cell carcinoma (GSRCC), advanced (widespread bone metastases)	Low back pain; PSA of 0.45 ng/mL	75	Male	China	2020	Multiple sites of increased tracer uptake (metastatic superscan)	^{68}Ga-PSMA PET/CT showed osteoblastic metastases in the hip bones; biopsy revealed GSRCC.
Iizumi S. [24]	Gastric cancer (signet-ring cell carcinoma), Stage IIA	Malignant pleural effusions and dyspnea	77	Female	Japan	2017	Diffuse increased skeletal activity (super scan)	CT showed pleural effusion, ascites, and multiple sclerotic bone lesions; cytology confirmed adenocarcinoma with signet-ring cells.
Kanazawa K. [25]	Gastric adenocarcinoma (Borrmann type 4, poorly differentiated)	Back pain and gait disturbance	51	Male	Japan	2009	Diffusely increased bone uptake without renal excretion (superscan)	CT showed osteosclerosis of vertebral bodies, ribs, and pelvic bones; MRI showed diffuse low signals in vertebral bodies without cortical bone disruption.
Ermiş F. [26]	Signet ring cell gastric carcinoma (early stage)	Weight loss, widespread body pain, and fatigue	21	Male	Turkey	2014	Typical superscan pattern: increased uptake throughout the skeleton, minimal activity in soft tissues and kidneys	CT showed increased density in vertebral and pelvic bones; MRI showed minimal diffuse thickening of the stomach; gastroscopy revealed flat erosions in the antrum, biopsy confirmed signet ring cell carcinoma.

Tago M. [27]	Poorly Differentiated Gastric Adenocarcinoma (Borrmann type 4)	Lower back pain	34	Female	Japan	2019	Beautiful bone sign with absent kidney sign	X-rays showed hyperdense areas in the lumbar spine; osteosclerotic changes noted, including disappearance of vertical lines of bone trabeculae and unclear vertebral endplates.
Omi R. [28]	Metastatic poorly differentiated adenocarcinoma (signet ring cell type)	Intractable middle back pain for 2 months	54	Male	Japan	2001	Increased uptake in the whole spine, pelvis, scapulas, sternum, and ribs; no uptake in the kidneys ("super scan")	Plain radiographs showed a mixture of osteosclerotic and osteolytic lesions in the spine; CT showed similar changes in vertebrae, pedicles, and laminas; MRI showed heterogeneous low signal intensities on T1 and high on T2.
Narváez J. [29]	Gastric Adenocarcinoma, pT3 pN1 M0	Weight loss, diffuse bone pain (6 months)	60	Male	Spain	1998	Super bone scan pattern with increased skeletal uptake	Radiographs showed widespread osteoblastic lesions in axial skeleton; CT confirmed diffuse chalky sclerosis without extraosseous metastases; biopsy revealed infiltrating adenocarcinoma with signet ring cells.
Narváez J. [29]	Gastric adenocarcinoma	Right-sided lumbar sciatica, asthenia, weight loss	49	Male	Spain	1998	Mixed osteolytic–osteosclerotic lesions in lumbar spine and pelvis; some with sunburst periosteal reaction	CT showed multiple mixed osteolytic–osteosclerotic lesions in lumbar spine and pelvis; partially ossified skeletal muscle metastases in right psoas and posterior paravertebral muscles; biopsy confirmed adenocarcinoma.
Lin C. [30]	Stage IV Gastric Adenocarcinoma	Low back pain for 3 months	43	Male	Taiwan	2012	Super scan pattern with high skeletal-to-renal ratio	MRI showed multiple marrow metastatic infiltrations; bone marrow biopsy confirmed metastatic carcinoma; ^{18}F-FDG PET/CT revealed low-grade gastric adenocarcinoma, increased ^{18}F-FDG uptake in the axial skeleton, and severe osteoporosis.
Ho Park J. [31]	Signet ring cell gastric carcinoma, disseminated bone marrow metastases	Back pain, dizziness, pancytopenia, elevated alkaline phosphatase (ALP)	63	Male	South Korea	2008	Increased uptake in both femurs, the humerus, and throughout the axial skeleton (excluding skull)	MRI of the spine and pelvis showing severe bone marrow infiltration; PET showing hypermetabolism in the stomach wall, suggesting the stomach as the primary site of cancer
Rather T. [32]	Krukenberg tumor (secondary, metastatic), Adenocarcinoma of stomach	Generalized body pains for 4 months; history of radical subtotal gastrectomy and chemotherapy for adenocarcinoma of stomach	38	Female	India	2014	Diffuse skeletal metastasis (Super Scan); increased uptake in skull, sternum, ribs, thoracic and lumbar spine, pelvis, and femoral shafts	PET-CT showing hypermetabolic left adnexal mass, indeterminate right adnexal mass (suggesting bilateral ovarian tumors); Follow-up CT revealed retroperitoneal lymphadenopathy and liver metastasis; Biopsy confirmed bilateral tubular-pattern Krukenberg tumor
Okazaki J. [33]	Gastric cancer with bone metastasis (osteoblastic)	Numbness around lips, massive ascites, hypocalcemia, abnormal bone formation near thoracic spine	60	Female	Japan	2017	Increased uptake of ^{99m}Tc diffusely throughout the skeleton (beautiful bone scan); cervical-thoracic-lumbar spine, pelvis, femurs, skull, shoulders	Contrast-enhanced CT showed massive ascites and abnormal bone formation adjacent to thoracic spine; PET-CT showed no abnormal accumulation of ^{18}F-FDG, suggesting peritoneal carcinomatosis