A Some examples for text prompts

We generated unique text prompts corresponding to each class of the images of our MedImgs dataset. Some examples are listed as follows:

- Image of benign acute Lymphoblastic Leukemia in humans;
- Image of brain cancer Meningioma in humans;
- Image of normal chest X-ray in humans;
- Image of lumpy skin disease in cows;
- Image of conjunctival infection or redness of eyes in dogs.

B More LLCM generated images

Fig. 5 displays several images generated by our LLCM model using a 4-step inference process, covering various human and animal diseases. Notably, we observe that the image quality for human diseases is consistently higher compared to that of animal diseases. This can be attributed to the larger availability of training data for human diseases, leading to better model generalization and more refined image synthesis in these categories. This discrepancy in performance can be attributed to the relatively smaller number of training images available for animals.

C Training and Test classes of MedImgs daataset

Tables. 4, 5, 6, and 6 provide details on the number of images in each of the 159 training classes, while Table 8 presents the corresponding information for the 35 test classes.
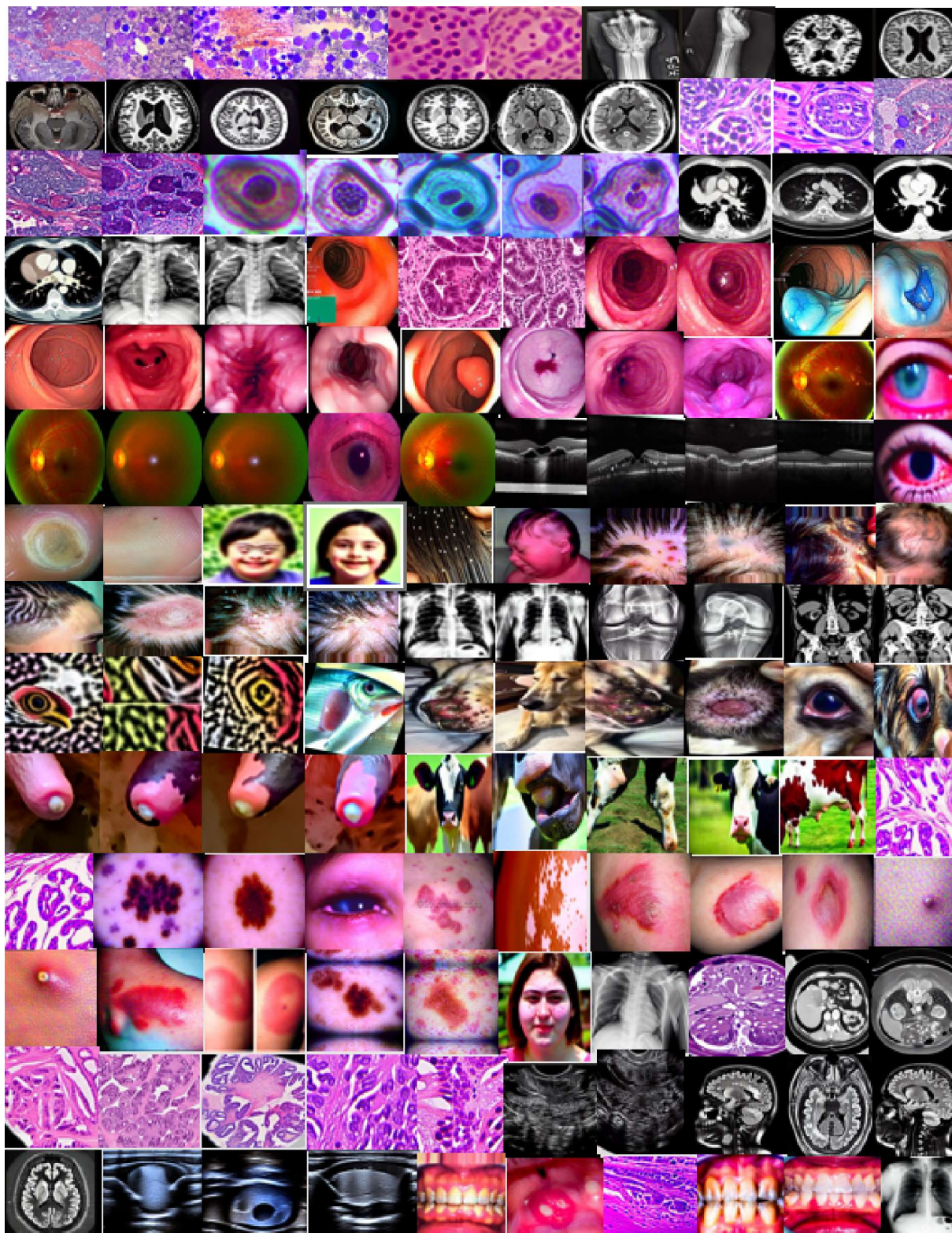
Figure 5: Generated images results with our LLCM model of (512×512) resolution with 4-step inference.

Table 4: Training Classes

Training Classes	Number of Images
Acne	2000
Alopecia Areata	1200
Alzheimer Mild Demented	896
Alzheimer Non Demented	2000
Alzheimer Very Mild Demented	293
Atopic Dermatitis	1552
Benign Acute Lymphoblastic Leukemia	1008
Benign Thyroid	400
Bone Fractured	2000
Bone Not Fractured	2000
Brain Cancer Glioma	468
Brain Cancer Meningioma	625
Brain Cancer Neurocitoma	262
Brain Cancer Other Categories	152
Brain Cancer Schwannoma	194
Brain Stroke Hemorrhagic	951
Brain Stroke Ischaemic	1552
Breast Cancer Benign	2000
Breast Cancer Malignant	2000
Calculus	1296
Cardiomegaly	2000
Cell Diseases in Human	1253
Chest Adeno Carcinoma	251
Chest Large Cell Carcinoma	51
Chest Normal CT Images	54
Chest Squamous Cell Carcinoma	90
Chronic Lymphocytic Leukemia	113
Chronic Respiratory Disease in Hen	659
Clear Cell Carcinoma	1999
Conjunctival Infection or Redness of Eyes in Dog	291
Contact Dermatitis	1200
Control Axial	1002
Control Sagittal	1014
Coryza Type of Respiratory Disease in Hen	284
Diabetic Retinopathy	1408
Diseases in Cattle	2000
Downsyndrome	1495
Dyed Lifted Polyps	500
Dyed Resection Margin	500
Dyskeratotic Cytology type of Cervical Cancer in Human	1508
Early Acute Lymphoblastic Leukemia	1970
Endometrioid Carcinoma	1999
Esophagitis	2000
Eye Cataract	1038
Eye Choroidal Neovascularization	2000
Eye Diabetic Macular Edema	2000
Eye Drusen	2000
Eye Glaucoma	1007
Eye Normal Retina	1028

Table 5: Training Classes

Training Classes	Number of Images
Follicular Lymphoma	139
Folliculitis	1200
Foot Abnormal Skin	512
Foot and Mouth Disease in Cow	884
Foot Normal Skin	543
Gangrene Disease in Human	1776
Gastric Carcinoma Stage 1	777
Gastric Carcinoma Stage 2	651
Gastrointestinal Lesion	113
Gingivitis	2000
Head Lice	1200
Health Respiratory System in Hen	634
Healthy Kidney in Human	2000
High-Grade Serous Carcinoma	1999
Hypodontia	1251
Infectious Bovine Keratoconjunctivitis Disease in Cow	193
Keratosis Type Skin Disease in Dog	1755
Kidney Cyst in Human	2000
Kidney Stone in Human	2000
Kidney Tumor in Human	2000
Koilocytotic Cytology type of Cervical Cancer in Human	1549
Leg Disease in Cow	255
Lichen Planus	1200
Liver Ballooning	996
Liver Fibrosis	992
Liver Inflammation	984
Liver Steatosis	990
Low Grade Serous Carcinoma	1999
Lumpy Skin Disease in Cow	276
Lumpy Skin related to Ecthyma Disease in Cattle	1042
Lung Benign Cancer	120
Lung Malignant Cancer	1339
Lyme Negative	1999
Lyme Positive	986
Malaria Parasitized	2000
Malaria Uninfected	2000
Male Pattern Baldness	1200
Malignant Thyroid	804
Mantle Cell Lymphoma	122
Melanoma Benign	2000
Melanoma Malignant	2000
Metaplastic Cytology type of Cervical Cancer in Human	1447
Microsatellite Instability	2000
Monkey Pox	2000
Mouth Ulcer	1999
Mucinous Carcinoma	1999
Multiple Sclerosis Axial	650
Multiple Sclerosis Sagittal	761
Nasal Discharge Related Skin Disease in Dog	2000
Nasal Obstructive Respiratory Disease in Cow	677
No Brain Tumor	344
No Cardiomegaly	1999

Table 6: Training Classes

Training Classes	Number of Images
No Downsyndrome	1499
No Ecthyma Disease in Cattle	406
No Lung Cancer	614
No Monkey Pox	2000
No Oral Cancer	31
No Osteoarthritis	1589
No Pharyngitis Disease in Human	473
No Ring Hyperkeratosis Disease in Cow	450
No Tuberculosis	2000
No Varicose Detected in Human	24
Non Atopic Dermatitis	1078
Non Diabetic Retinopathy	1430
Normal Cecum	500
Normal Chest XRay in Human	1341
Normal Gastrointestinal System	113
Normal Pancreas	423
Normal Pylorus	500
Normal Retinal OCT	2000
Normal Skin in Cattle	1520
Normal Thyroid	171
Normal Z Line	500
Ocular Discharge in Eyes in Dog	96
Oral Cancer	95
Osteoarthritis	2000
Pancreatic Tumor	578
Parabasal Cytology type of Cervical Cancer in Human	1635
PCOS Negative	1143
PCOS Postive	781
Pharyngitis Disease in Human	345
Pink Eye Disease in Cattle	490
Pink Eye Virus Detection in Human	1688
Pneumonia Positive Chest XRay in Human	2000
Polyps	1999
Pre Acute Lymphoblastic Leukemia	1926
Pro Acute Lymphoblastic Leukemia	1608
Prostate Cancer	1999
Psoriasis Negative	1054
Psoriasis Positive	1752
Rough Ring Hyperkeratosis Disease in Cow	187
Scalp Psoriasis	1200
Seborrheic Dermatitis	1200
Sehat Type of Eye Disease in Cattle	294
Shoulder Implant XRay	597
Skin Disease in Fish	2000
Skin First Degree Burn	1056
Skin Lesions in Eyes in Dog	1918
Skin Second Degree Burn	978
Skin Third Degree Burn	510
Smooth Ring Hyperkeratosis Disease in Cow	491
Superficial-Intermediate Cytology	1710
Telogen Effluvium	1200

Table 7: Training Classes

Training Classes	Number of Images
Tinea Capitis	1200
Tooth Discoloration	1999
Tuberculosis	700
Ulcerative Colitis	1999
Varicose Detected in Human	87
Very Rough Ring Hyperkeratosis Disease in Cow	21
Vitiligo in Human	2000
TOTAL	181117

Table 8: Test Classes

Test Classes	Number of Images
Bone Fractured	360
Bone Not Fractured	240
Breast Cancer Benign	4074
Breast Cancer Malignant	4042
Cardiomegaly	219
Chest Pneumonia Positive Chest XRay	390
Clear Cell Carcinoma	4130
Cow Teats Test Data	380
Dog Skin Disease Test Data	664
Endometrioid Carcinoma	6154
Esophagitis	896
Gingivitis	349
High-Grade Serous Carcinoma	11207
Low-Grade Serous Carcinoma	1195
Lyme Negative	2375
Melanoma Benign	3500
Melanoma Malignant	3105
Monkey Pox	1001
Mouth Ulcer	806
Mucinous Carcinoma	1599
No Cardiomegaly	219
No Monkey Pox	1335
No Oral Cancer	31
No Osteoarthritis	779
No Tuberculosis	1500
Noncancerous Esophagus	6973
Normal Chest XRay	234
Normal Pancreas	225
Oral Cancer	95
Osteoarthritis	486
Pancreatic Tumor	18
Polyps	908
Prostate Cancer	8616
Tooth Discoloration	17
Ulcerative Colitis	888
TOTAL	69010