From: Fauci, Anthony (NIH/NIAID) [E]
Sent: Sun, 1 Oct 2017 20:15:27 +0000
To: Folkers, Greg (NIH/NIAID) [E]
Subject: FW: Confidential - A new bat-origin coronavirus emerging in pigs in China discovered under our NIAID R01
Attachments: Nature 2017-05-06890-main text with figures and tables.pdf
Importance: High

Confidential, but FYI for you

From: Peter Daszak [mailto:daszak@ecohealthalliance.org]
Sent: Sunday, October 01, 2017 1:22 PM
To: Fauci, Anthony (NIH/NIAID) [E] (b) (6)
Cc: Morens, David (NIH/NIAID) [E] (b) (6); David Morens (b) (6) (b) (6); Kurilla, Michael (NIH/NIAID) [E] (b) (6); (b) (6); Stemmy, Erik (NIH/NIAID) [E] (b) (6); Alison Andre <andre@ecohealthalliance.org>; Aleksei Chmura <chmura@ecohealthalliance.org>
Subject: Confidential - A new bat-origin coronavirus emerging in pigs in China discovered under our NIAID R01
Importance: High

Dear Dr Fauci and NIAID colleagues,

It was a pleasure to meet you again today. I've attached an unpublished paper, currently in the second round of review with *Nature* that describes a novel bat-origin Coronavirus (SADS-CoV: Swine Acute Diarrheal Syndrome coronavirus) that recently spilled over into pig farms in Southern China, leading to the death of over 25,000 piglets in 5+ farms in Guandong Province.

The virus originates in the same group of bats as SARS-CoV, and emerged in the same place. It's not known to be zoonotic (we've tested 35+ pig farm workers with an antibody assay and none are positive. The pig farm owners tell us the virus is now under control, thanks to culling and separation of infected herds. It's not yet known if this virus has appeared elsewhere, but we are looking. We're also doing assays to find out if it can infect human cells in the lab – so far no evidence of this.

I hope this paper is of interest. You should know that this work was supported by a NIAID R01 that Erik Stemmy is the Program Officer for, and that I'm PI on, with Zhengli Shi as co-PI.

If you want any other information at all, please don't hesitate to email or call and I'd be happy to come over to NIAID to brief you further. I'll also let you know if/when it will be published so that we can try to foster some publicity as appropriate.

Cheers,

Peter

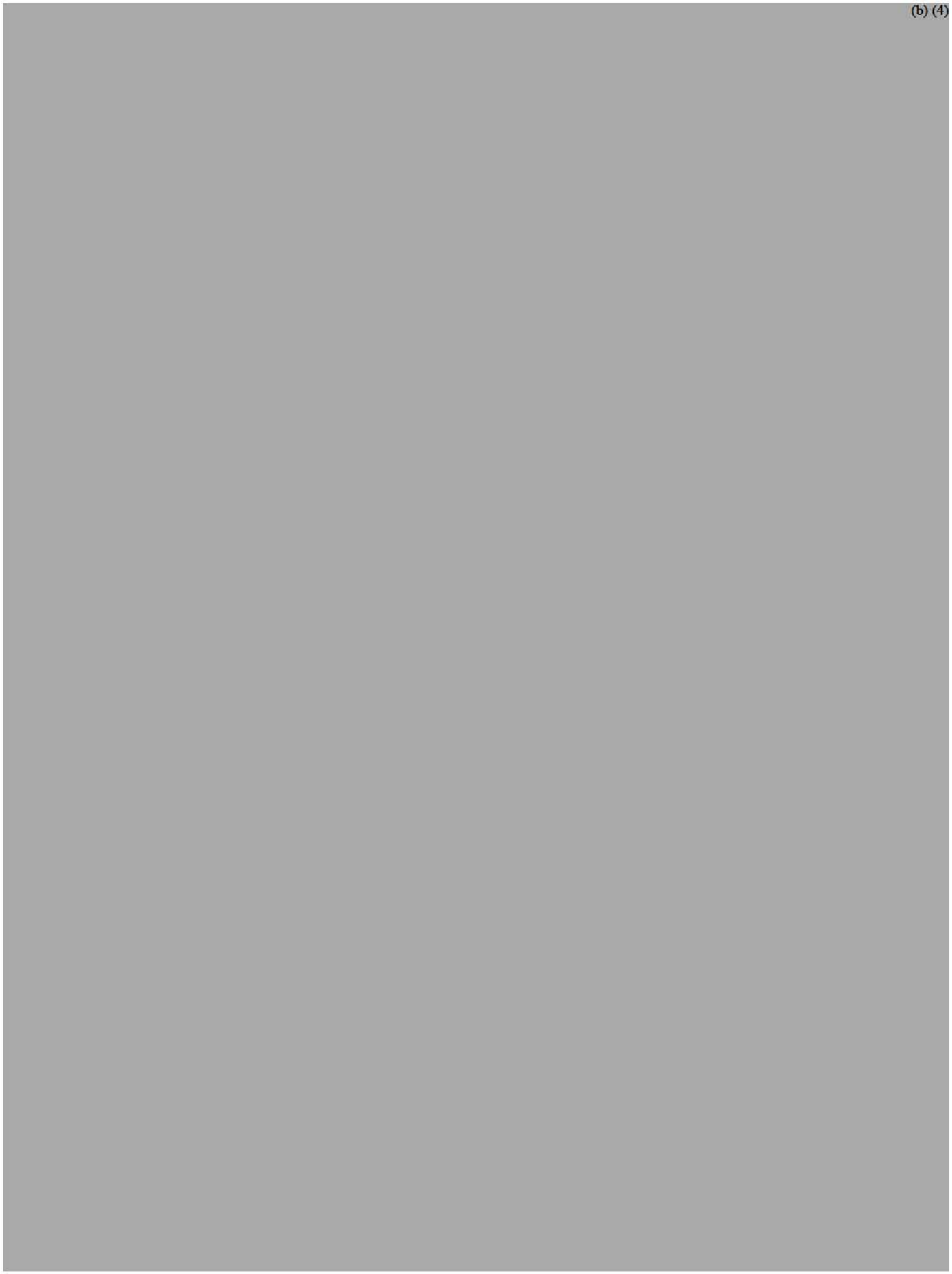
Peter Daszak
President

EcoHealth Alliance
460 West 34th Street – 17th Floor
New York, NY 10001

Tel. +1 212-380-4473
www.ecohealthalliance.org

EcoHealth Alliance leads cutting-edge research into the critical connections between human and wildlife health and delicate ecosystems. With this science we develop solutions that prevent pandemics and promote conservation.

(b) (4)



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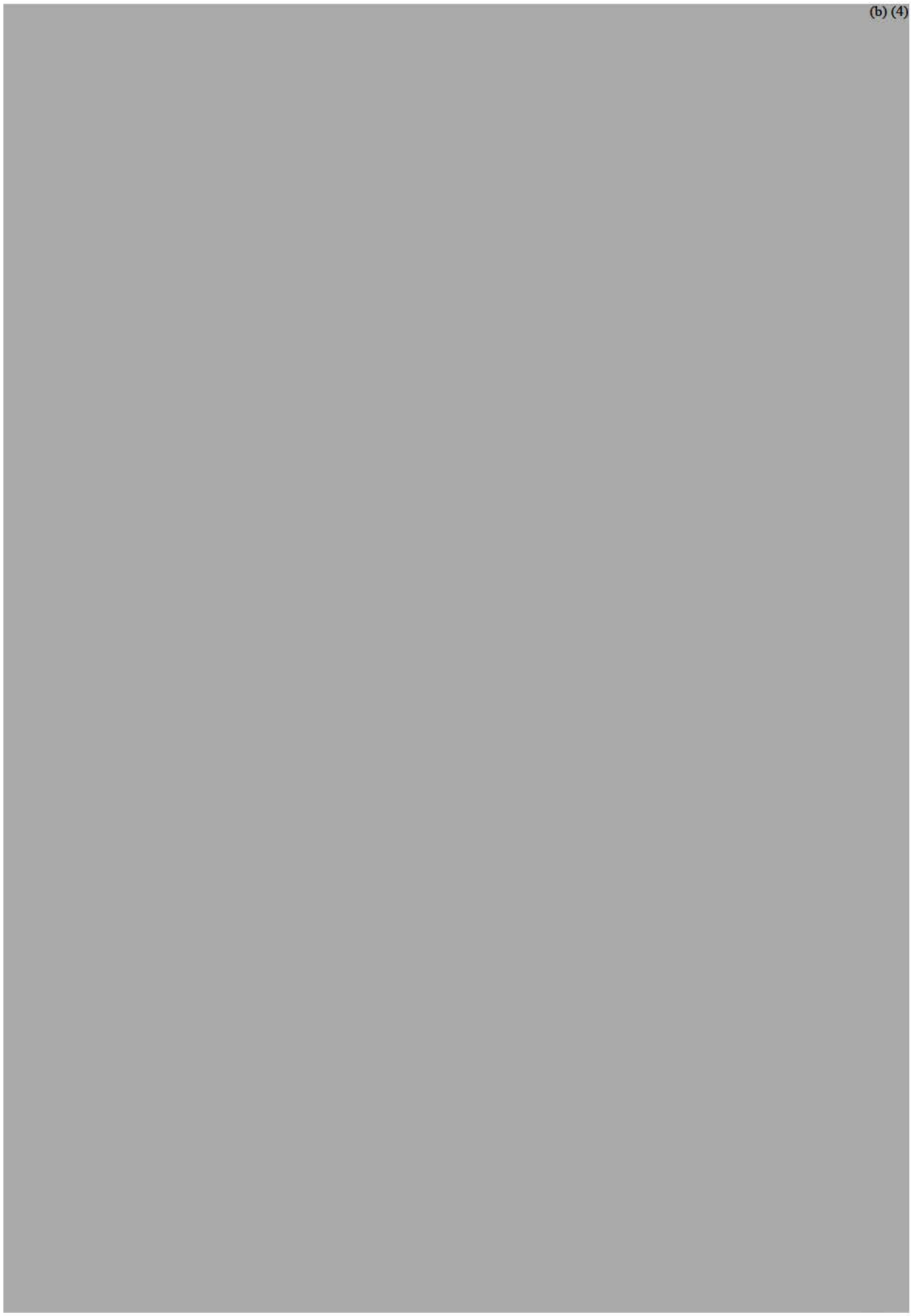

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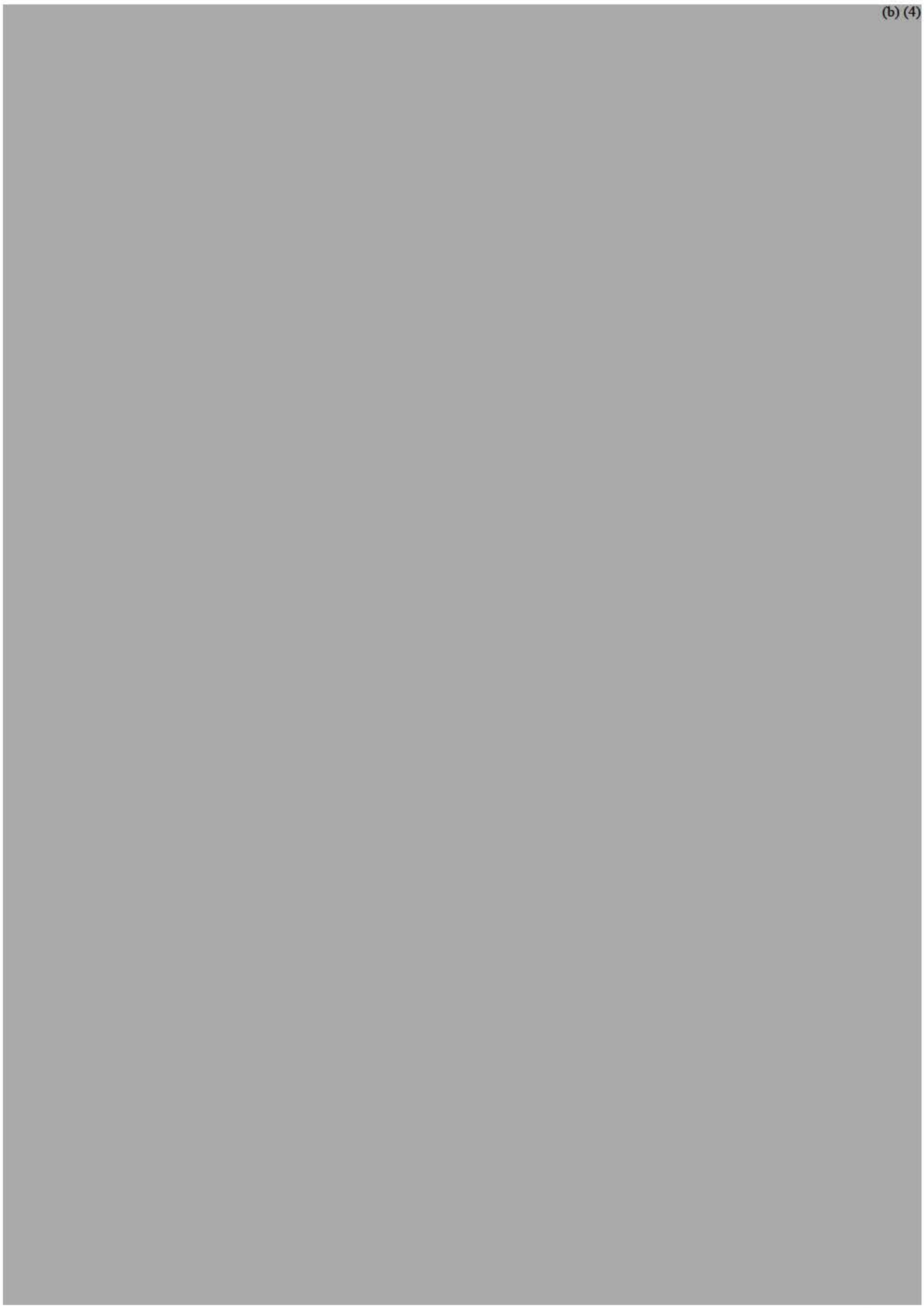

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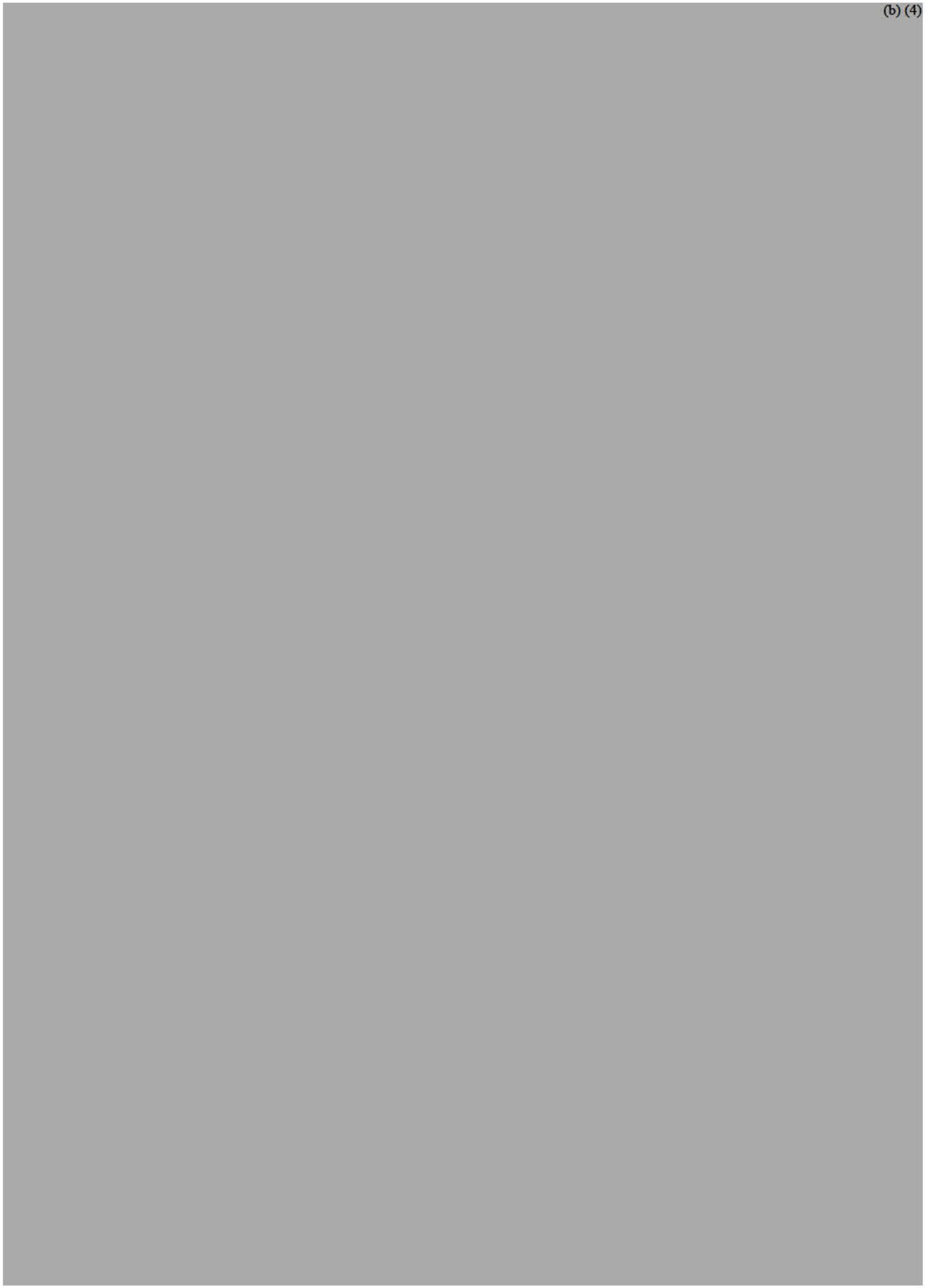

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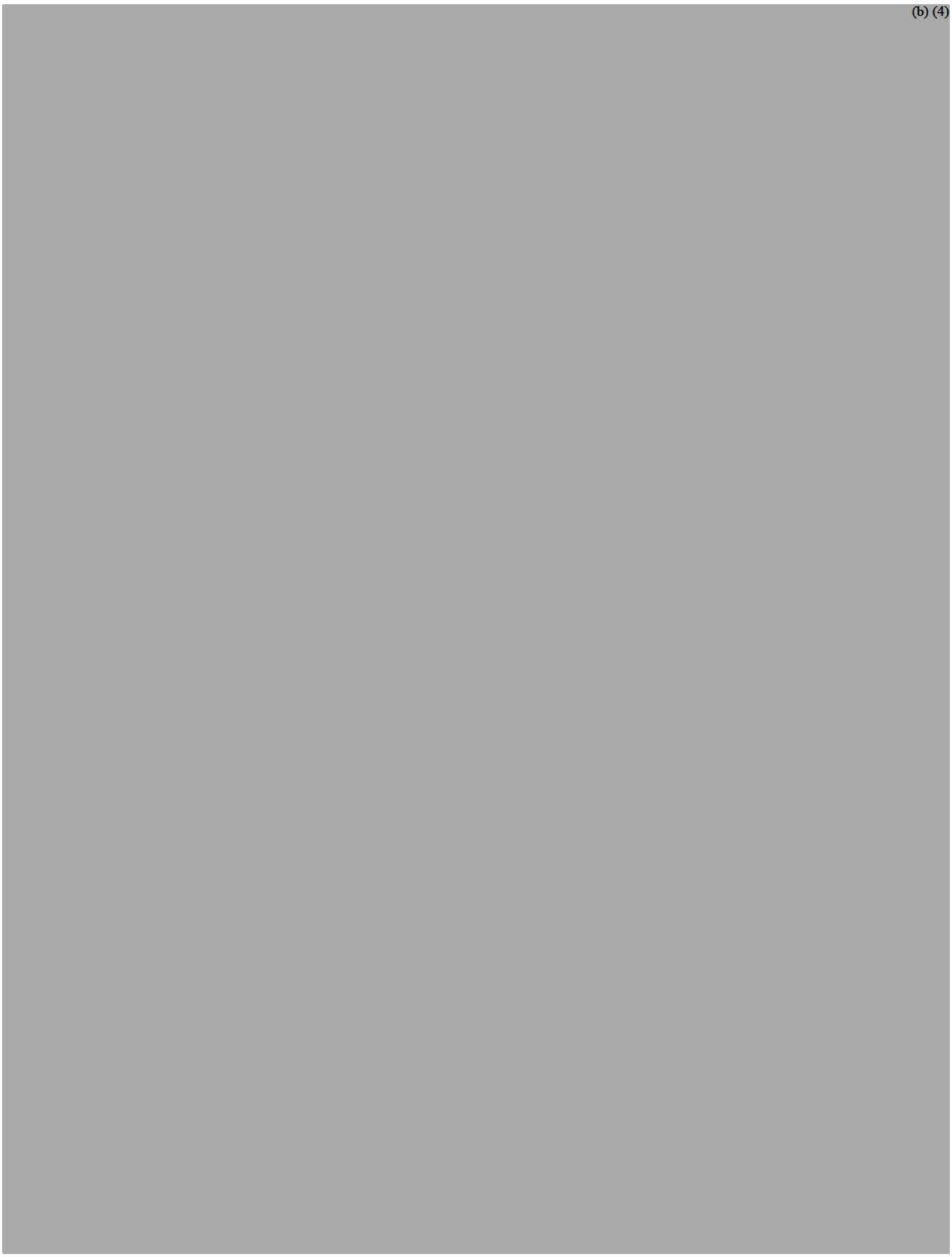

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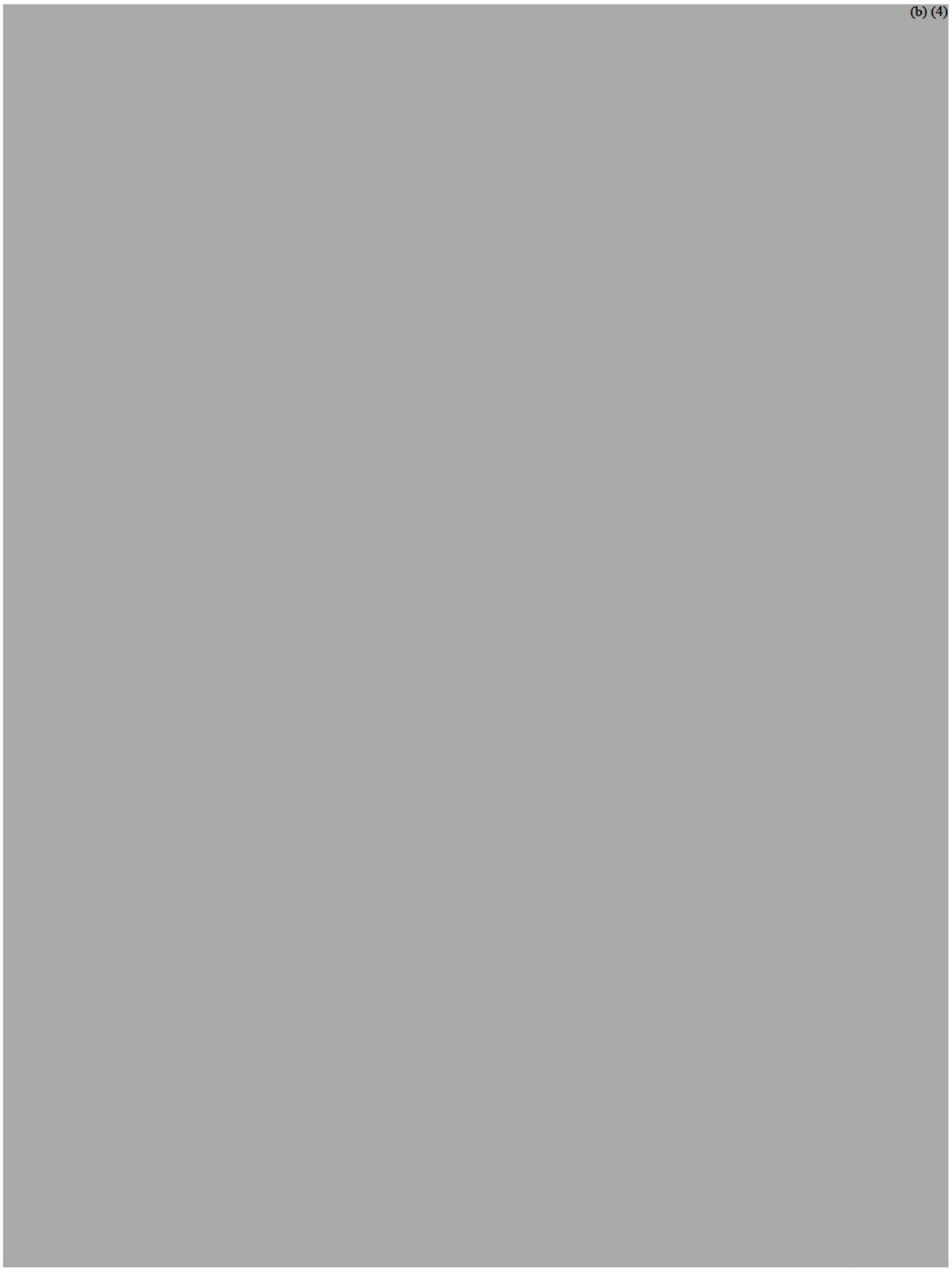

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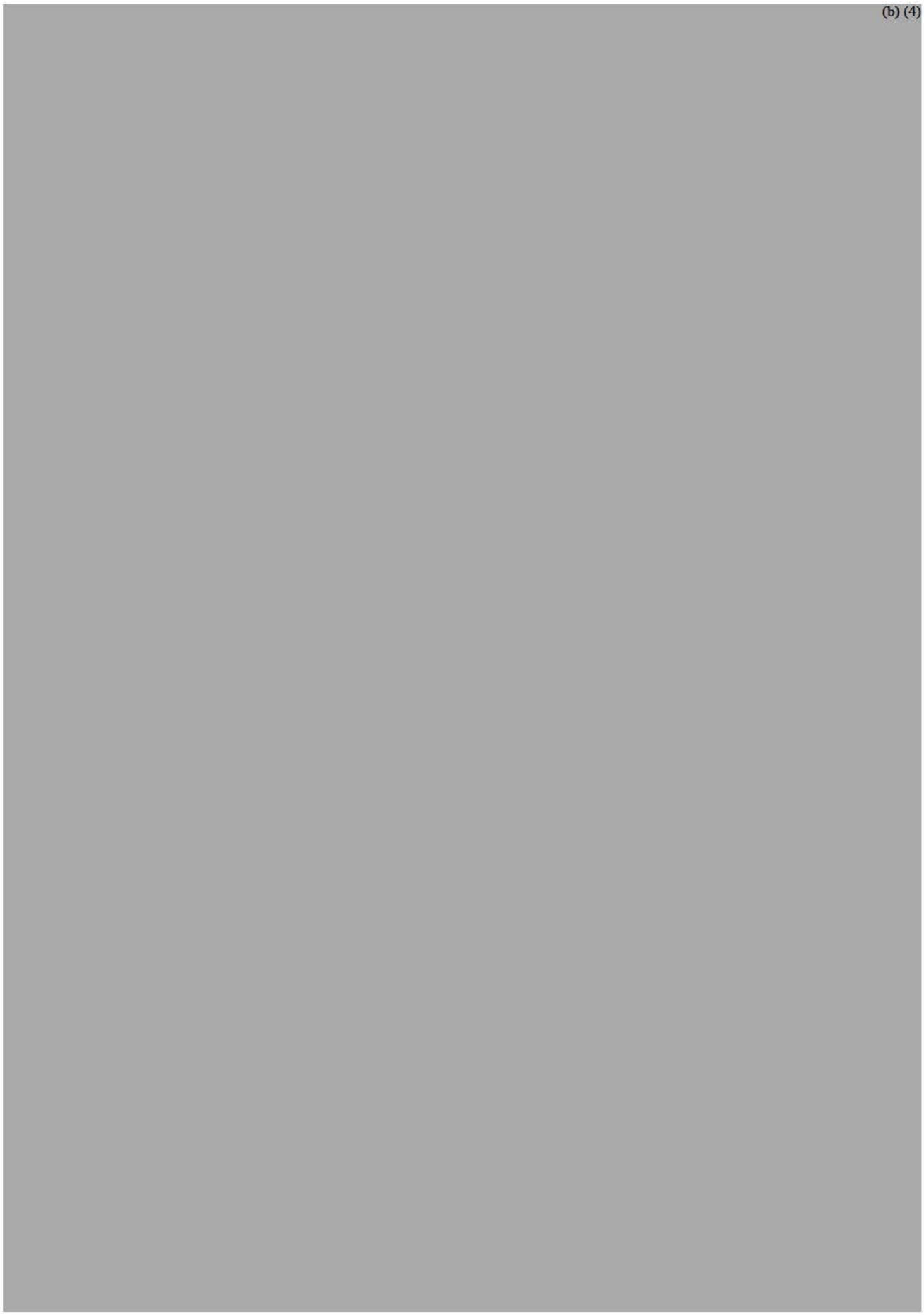

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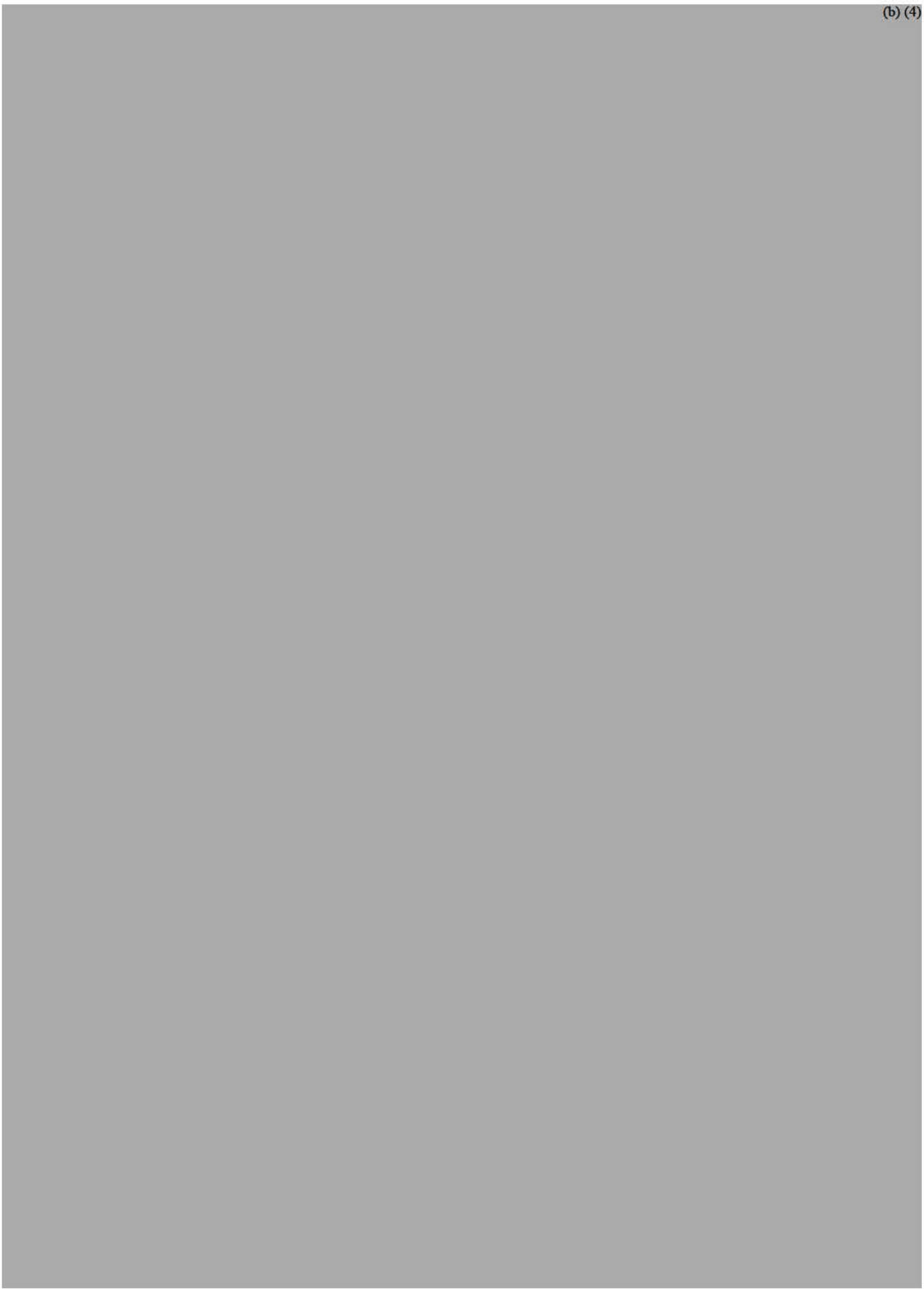

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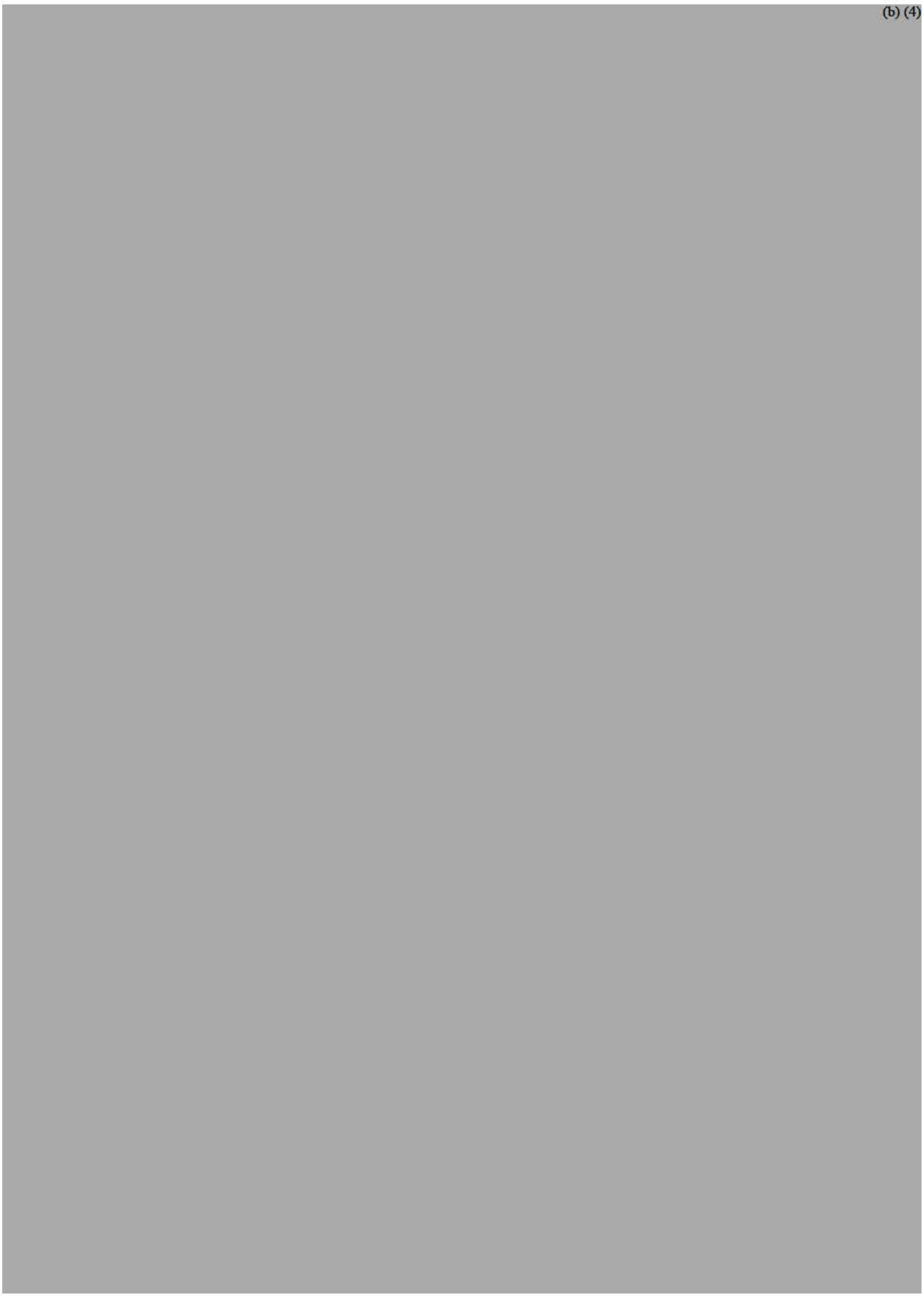

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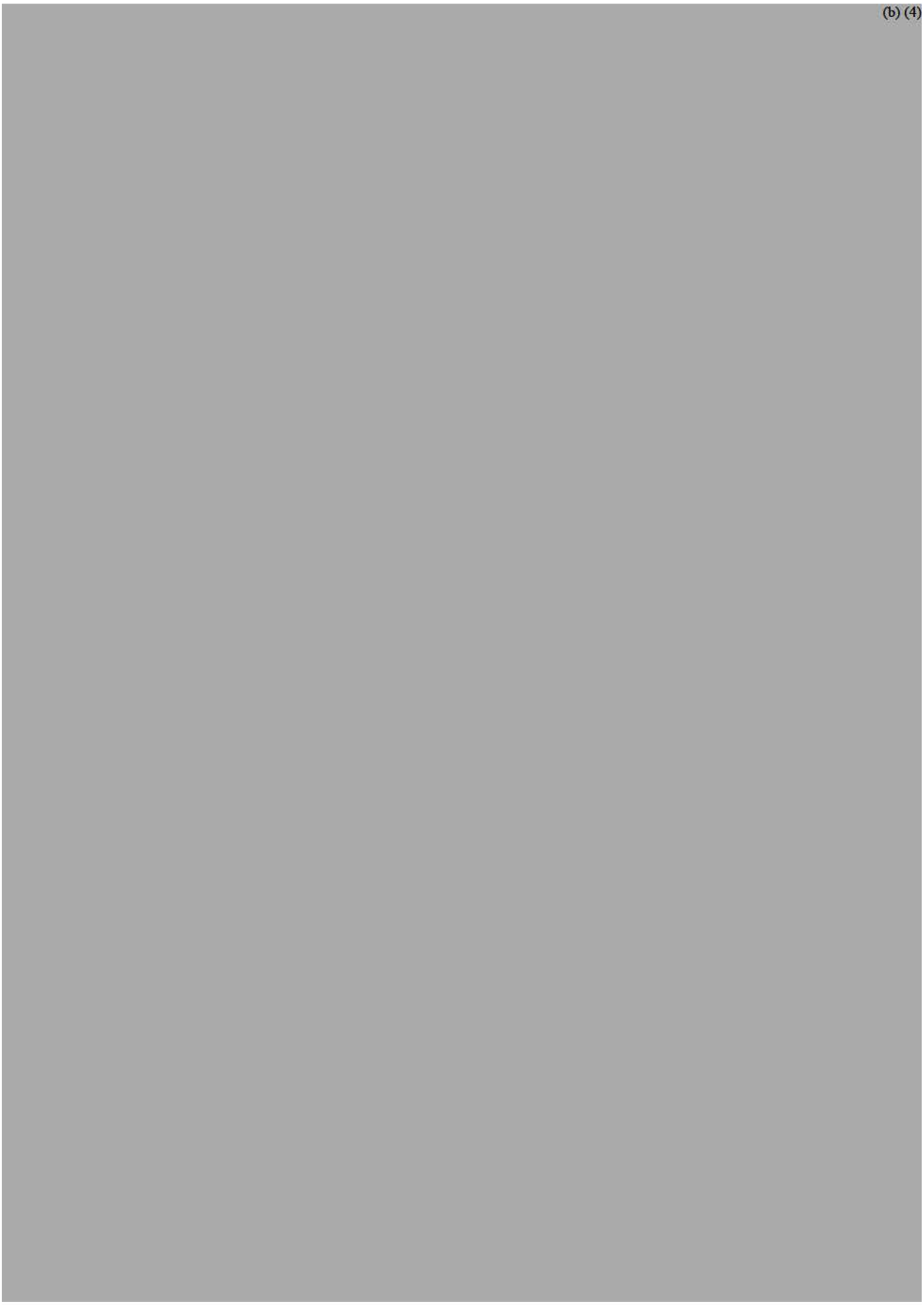

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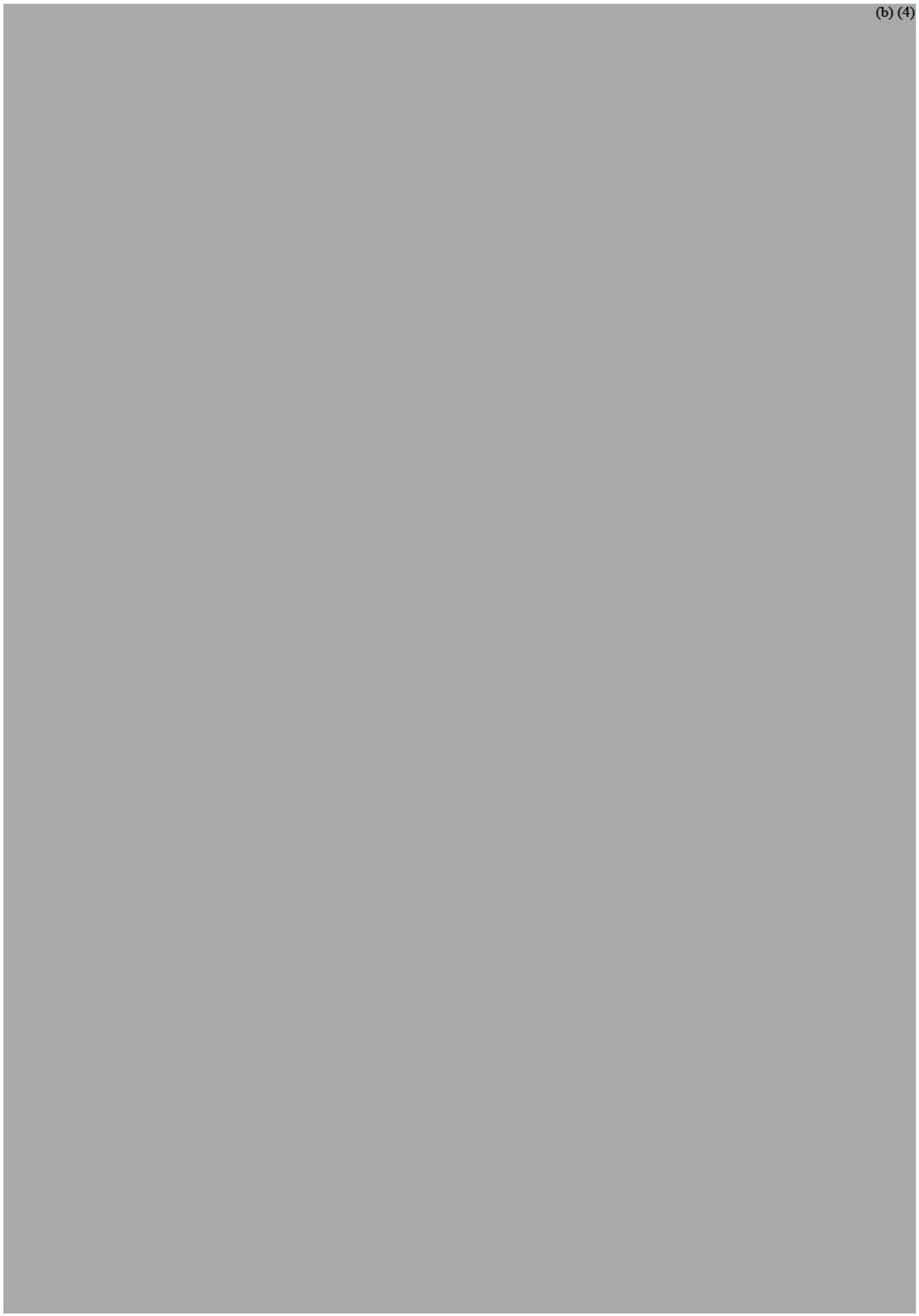

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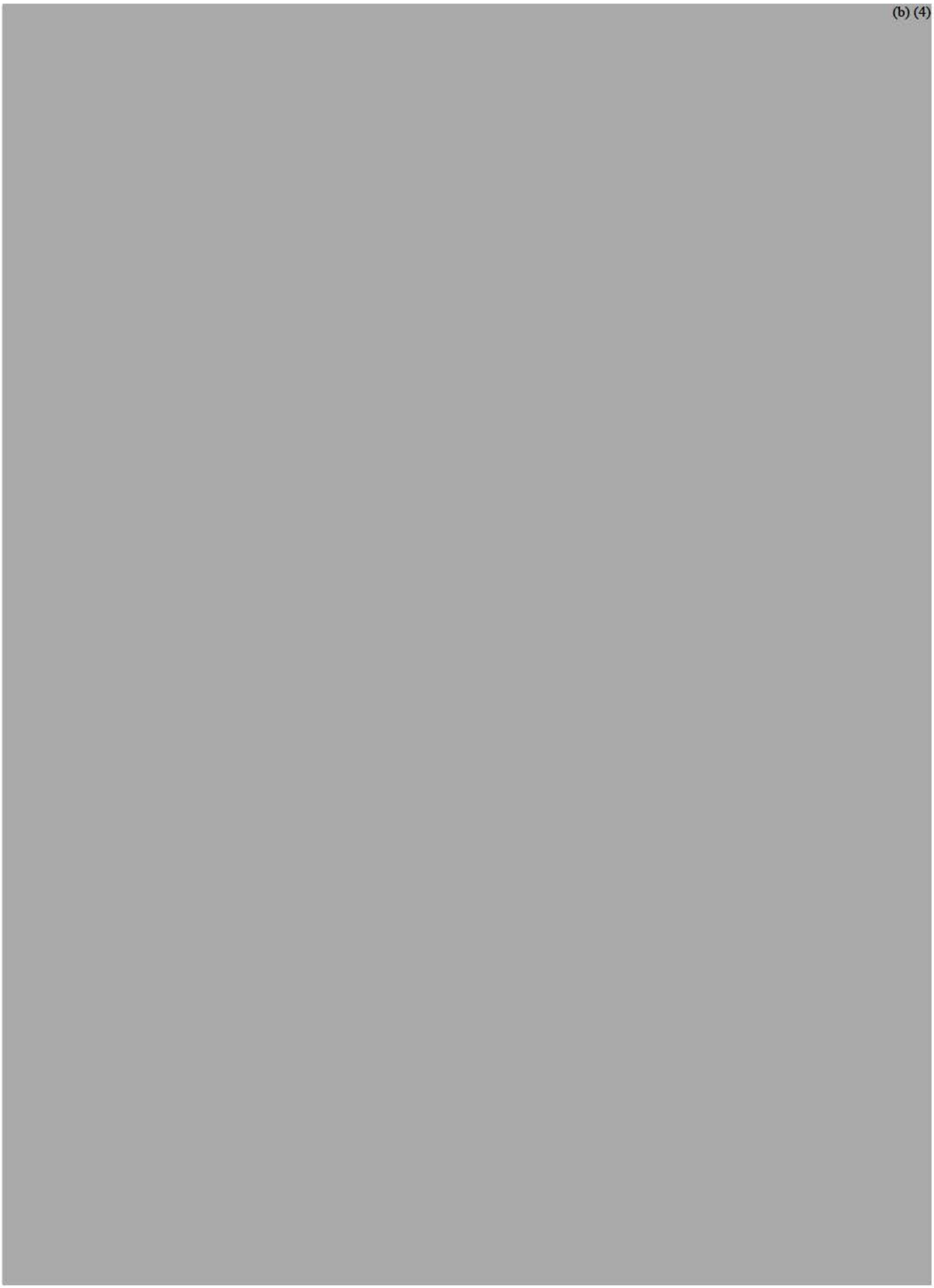

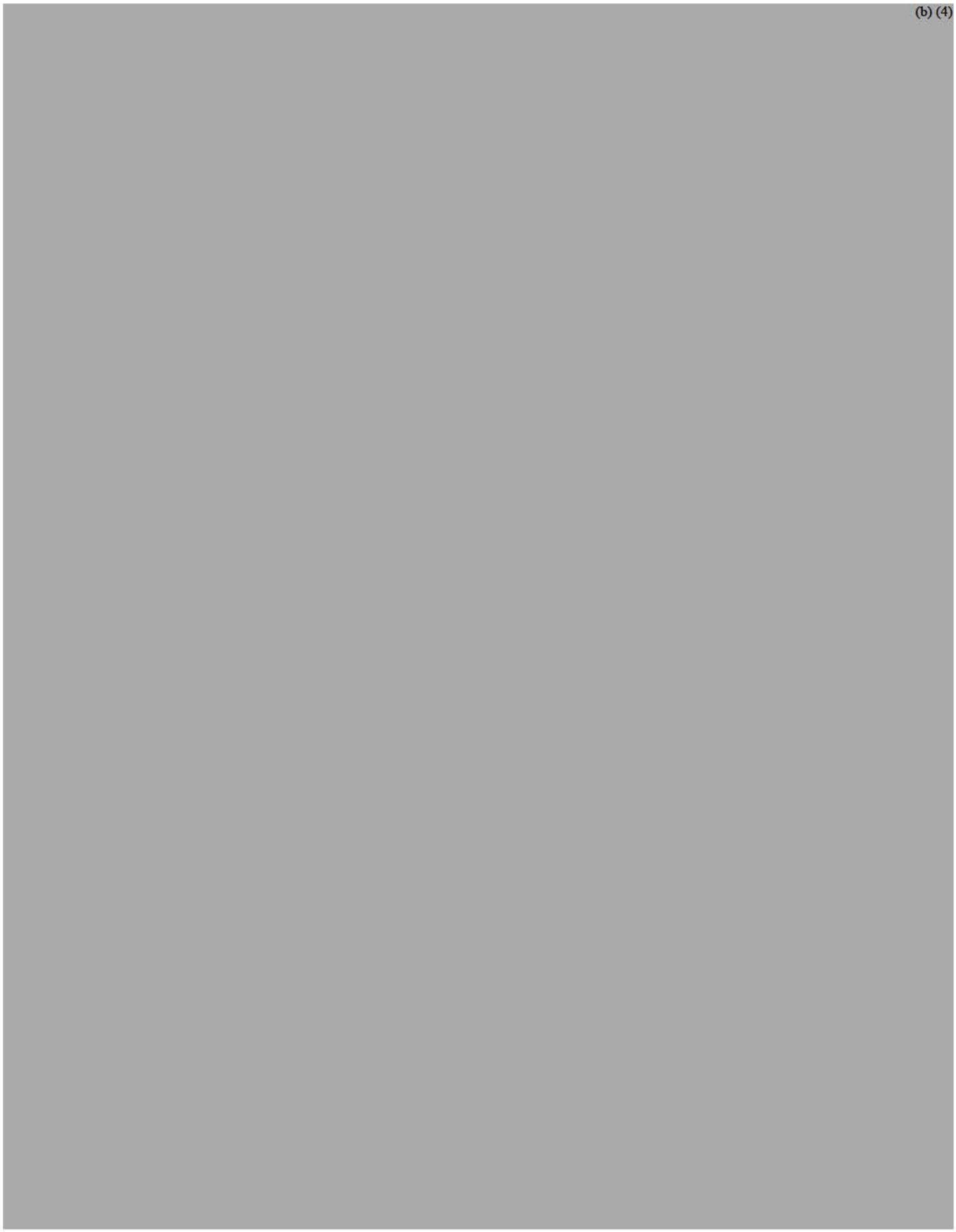

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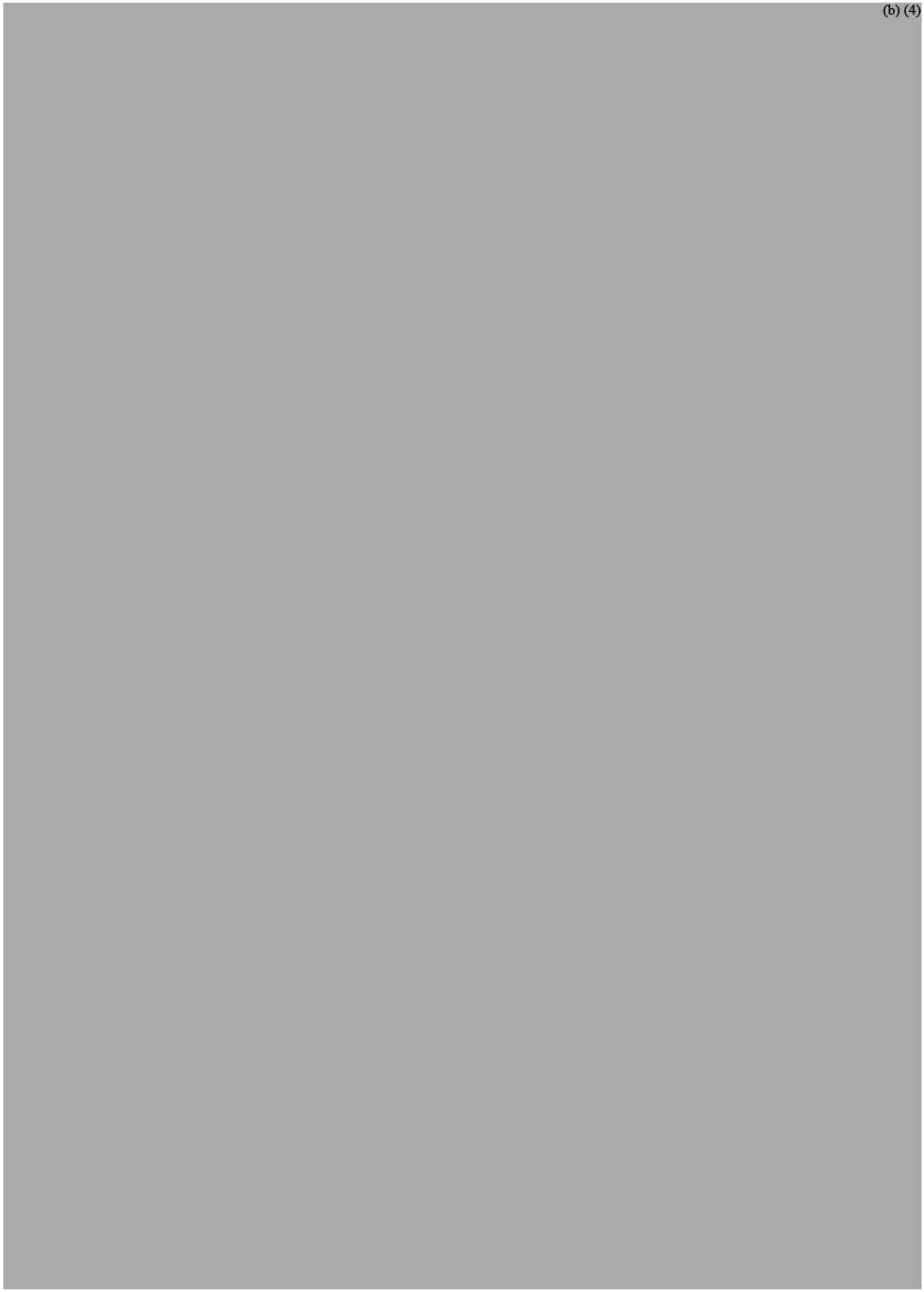

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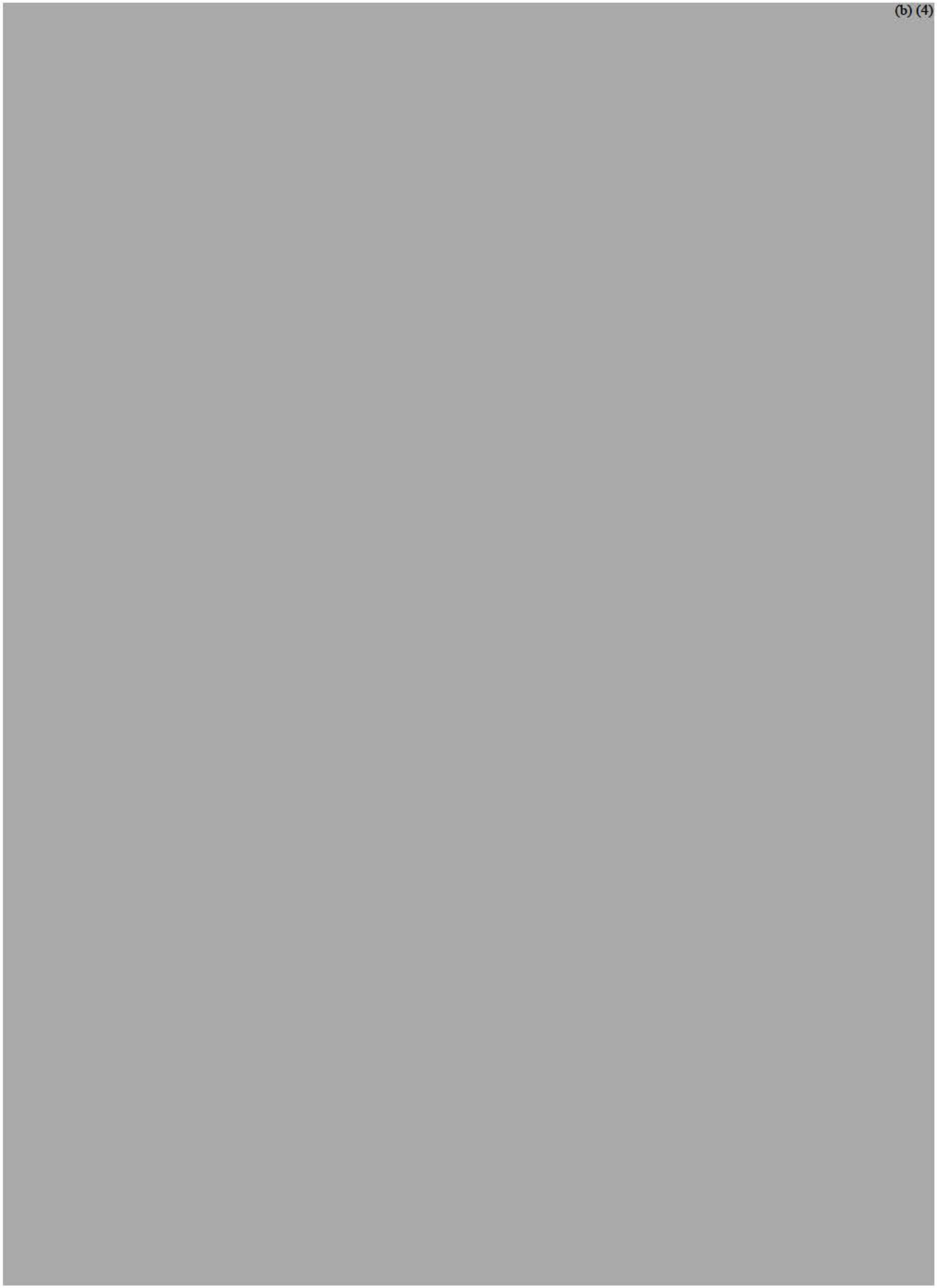

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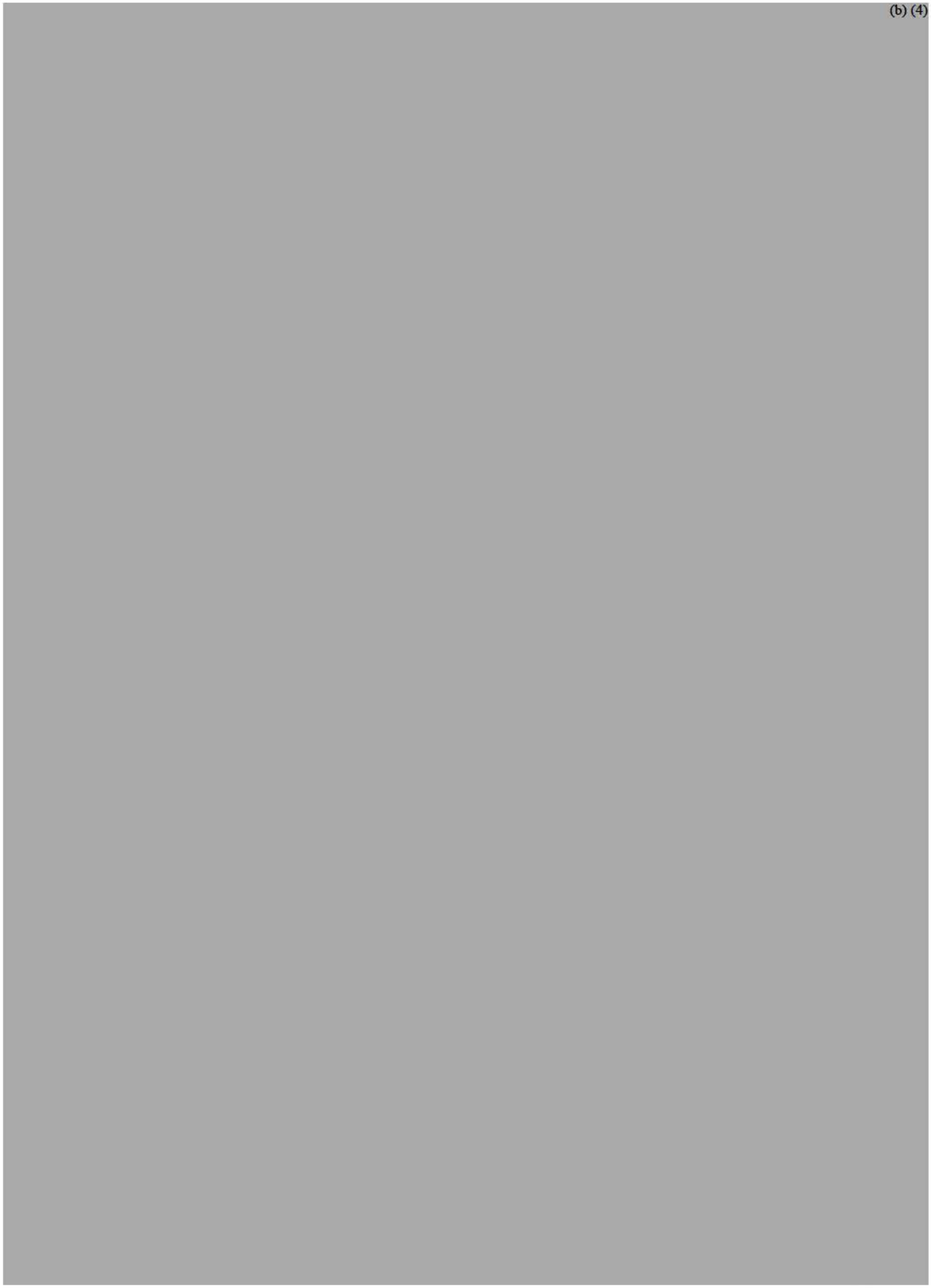

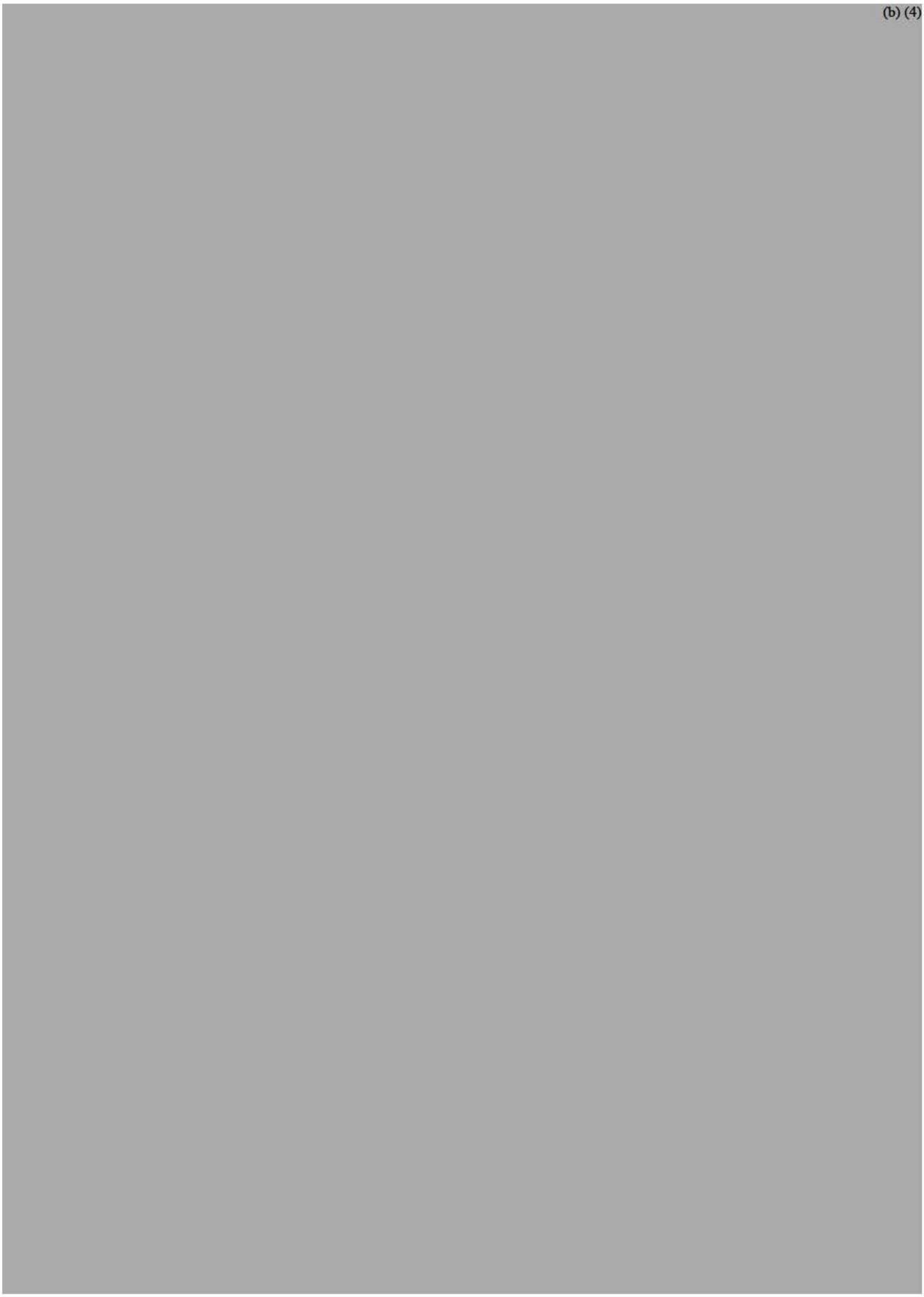

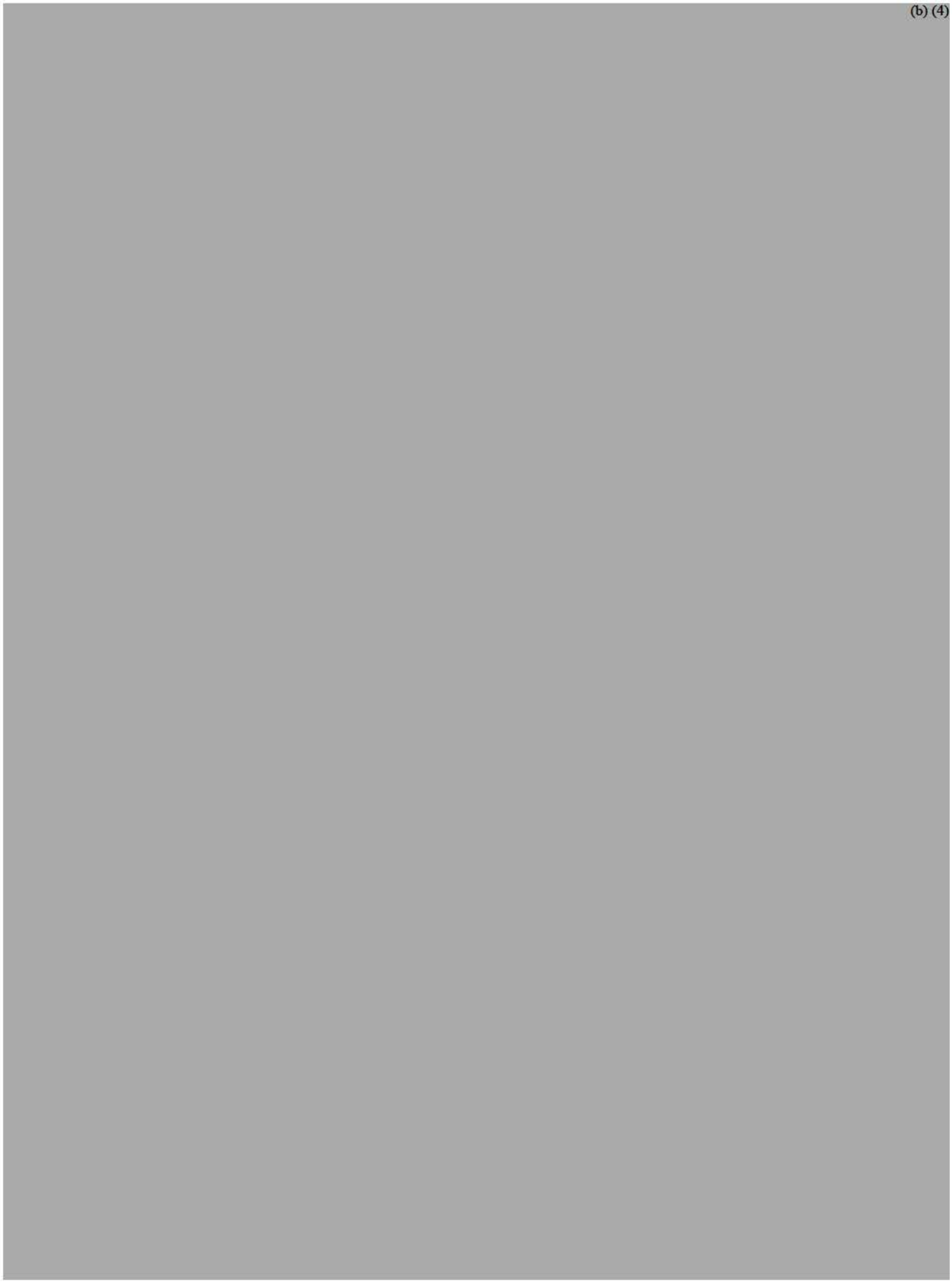

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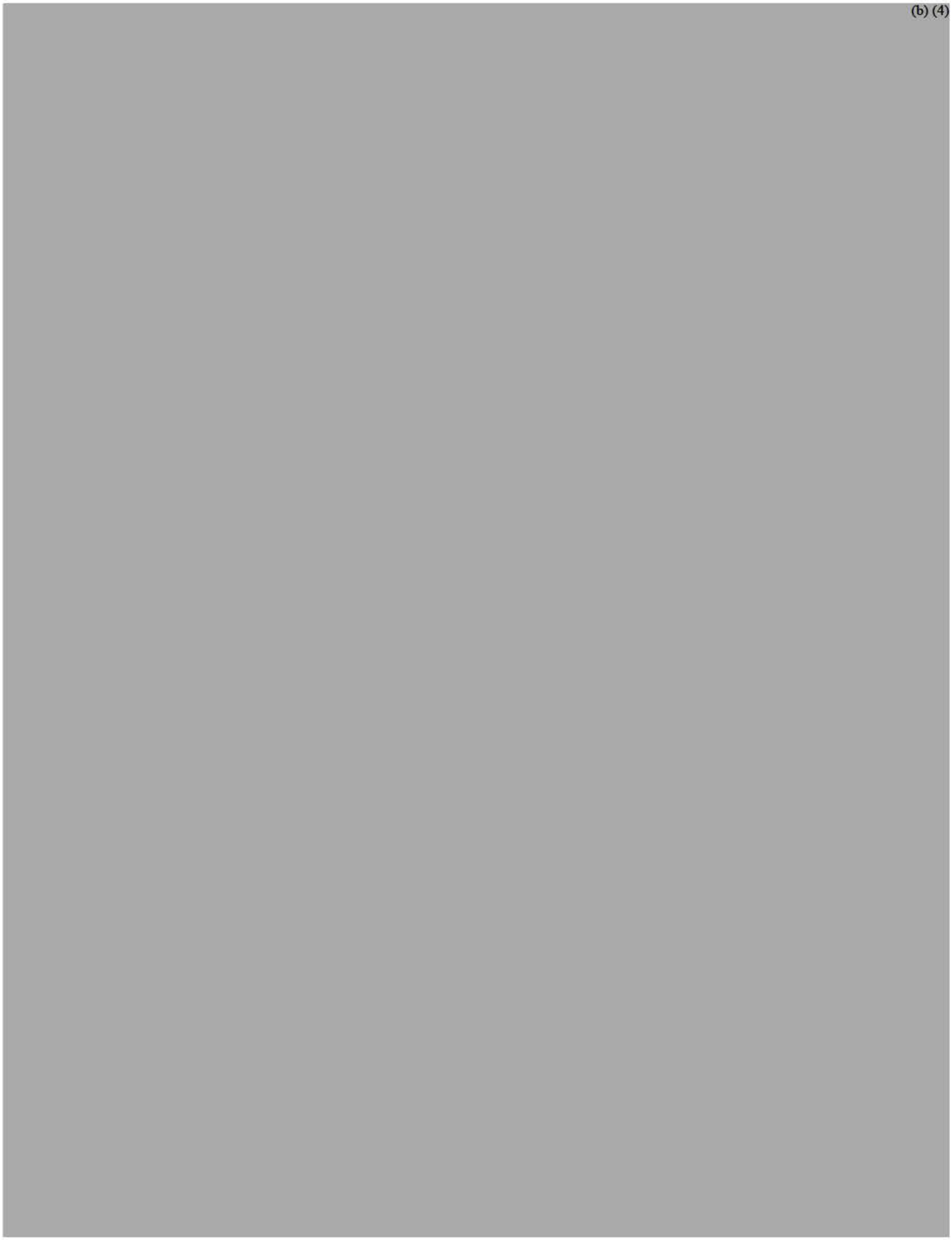

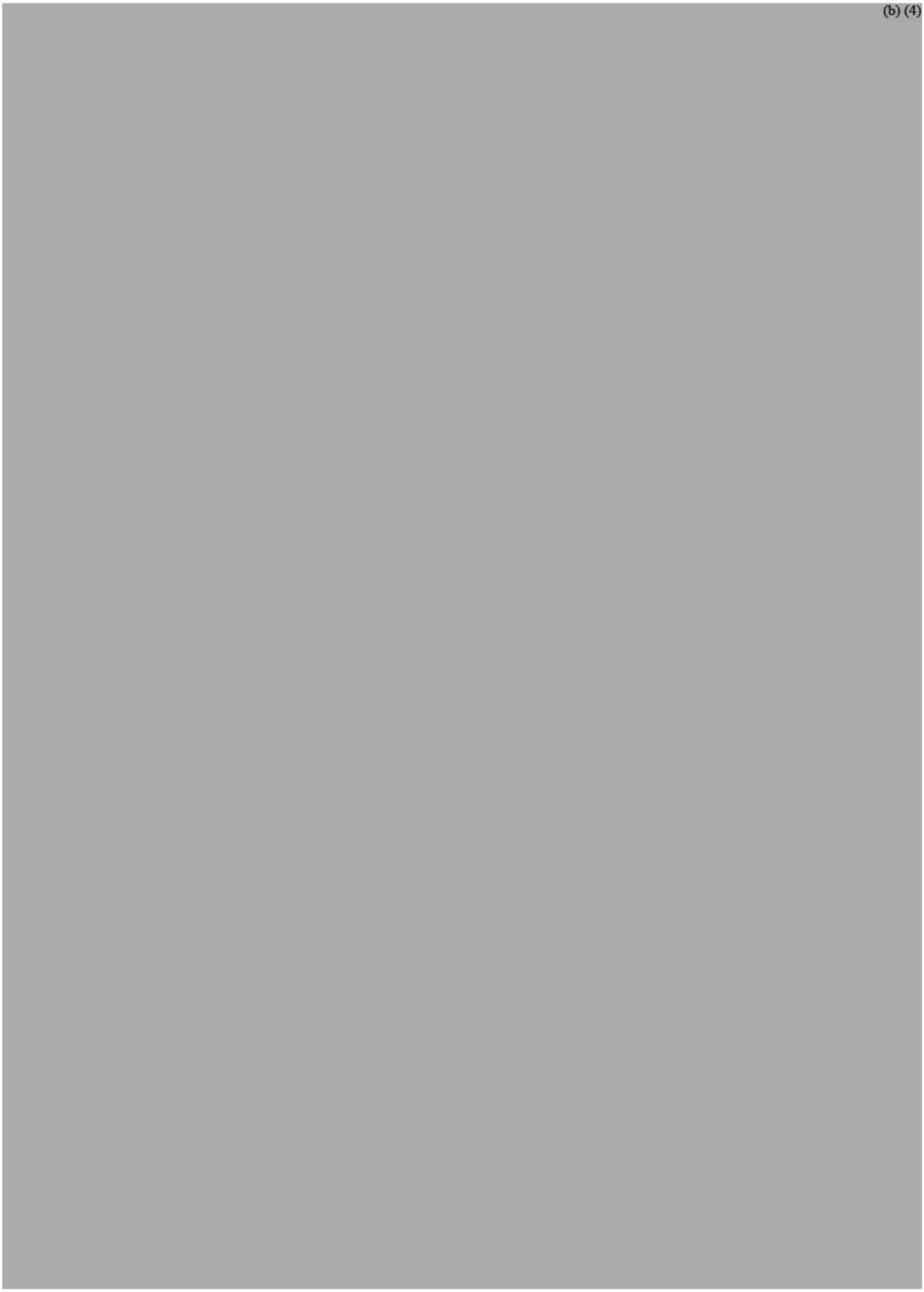

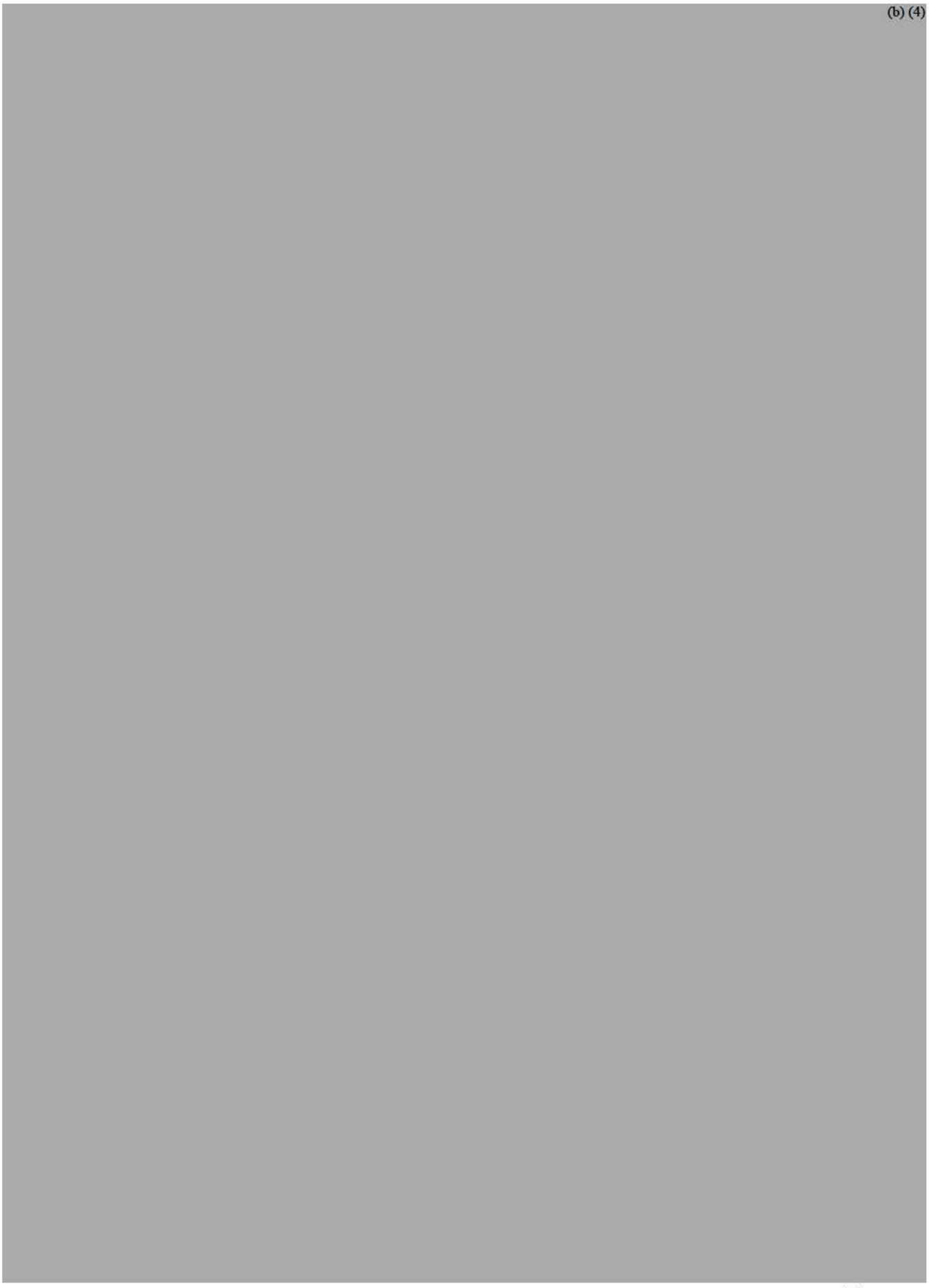

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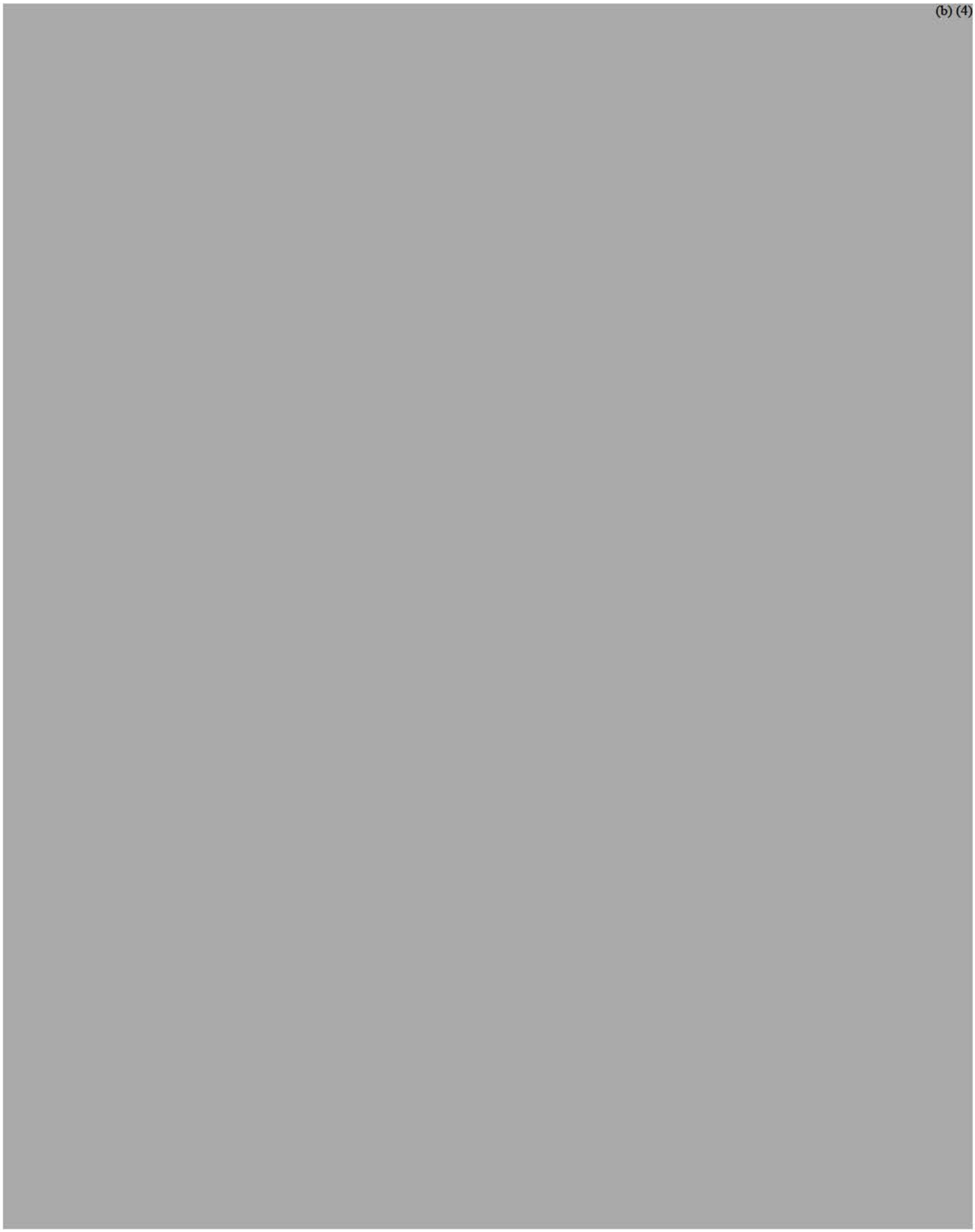

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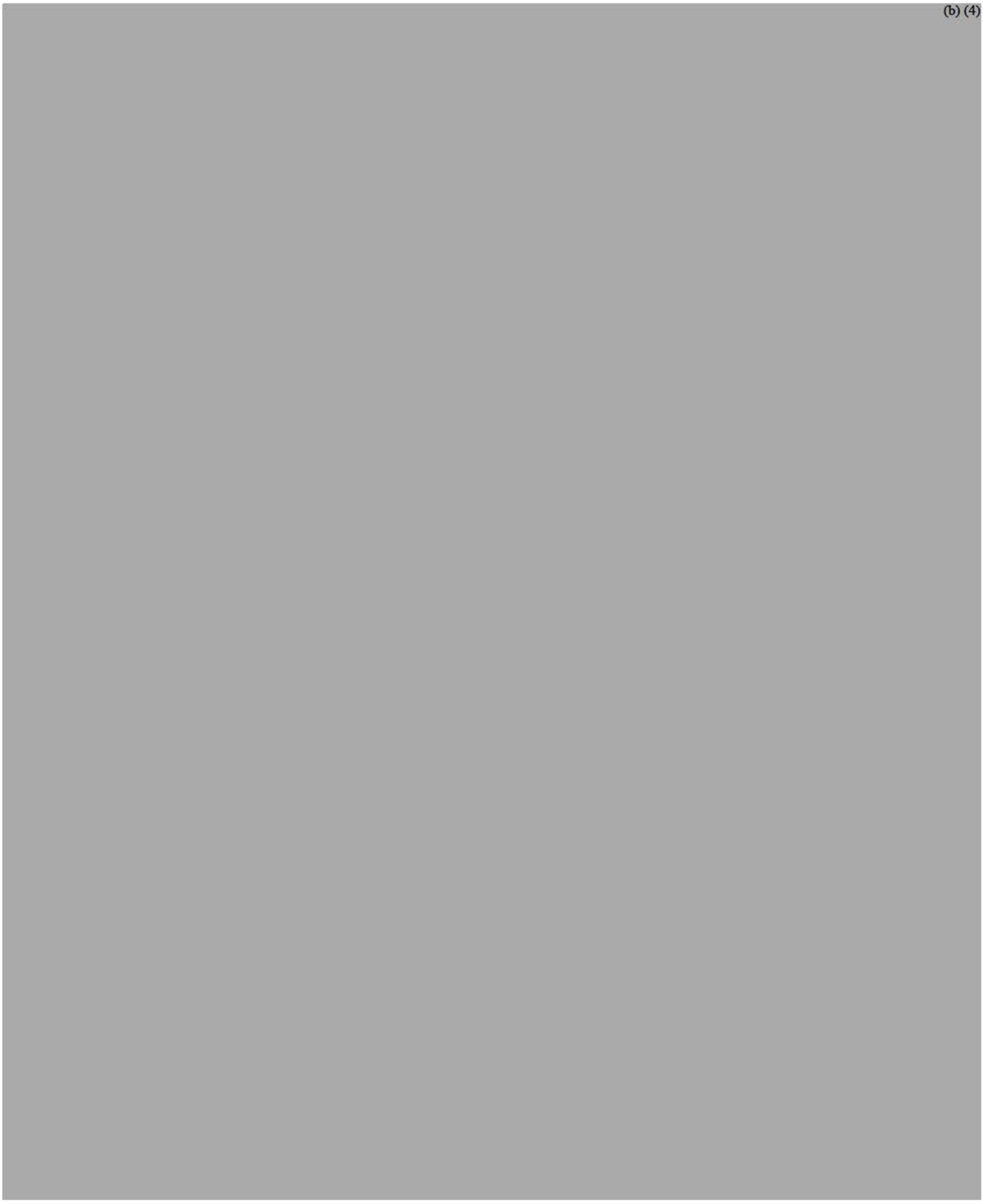

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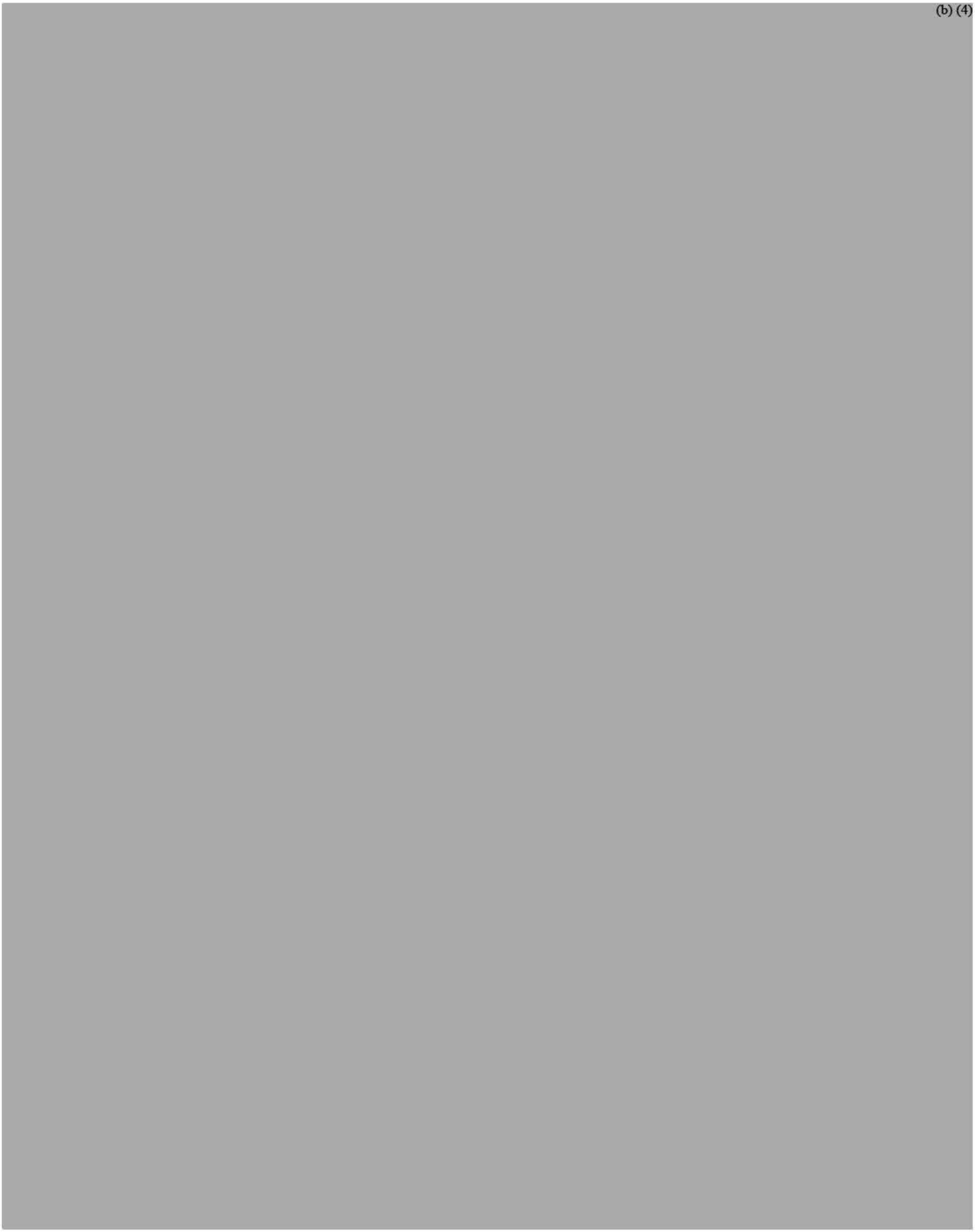

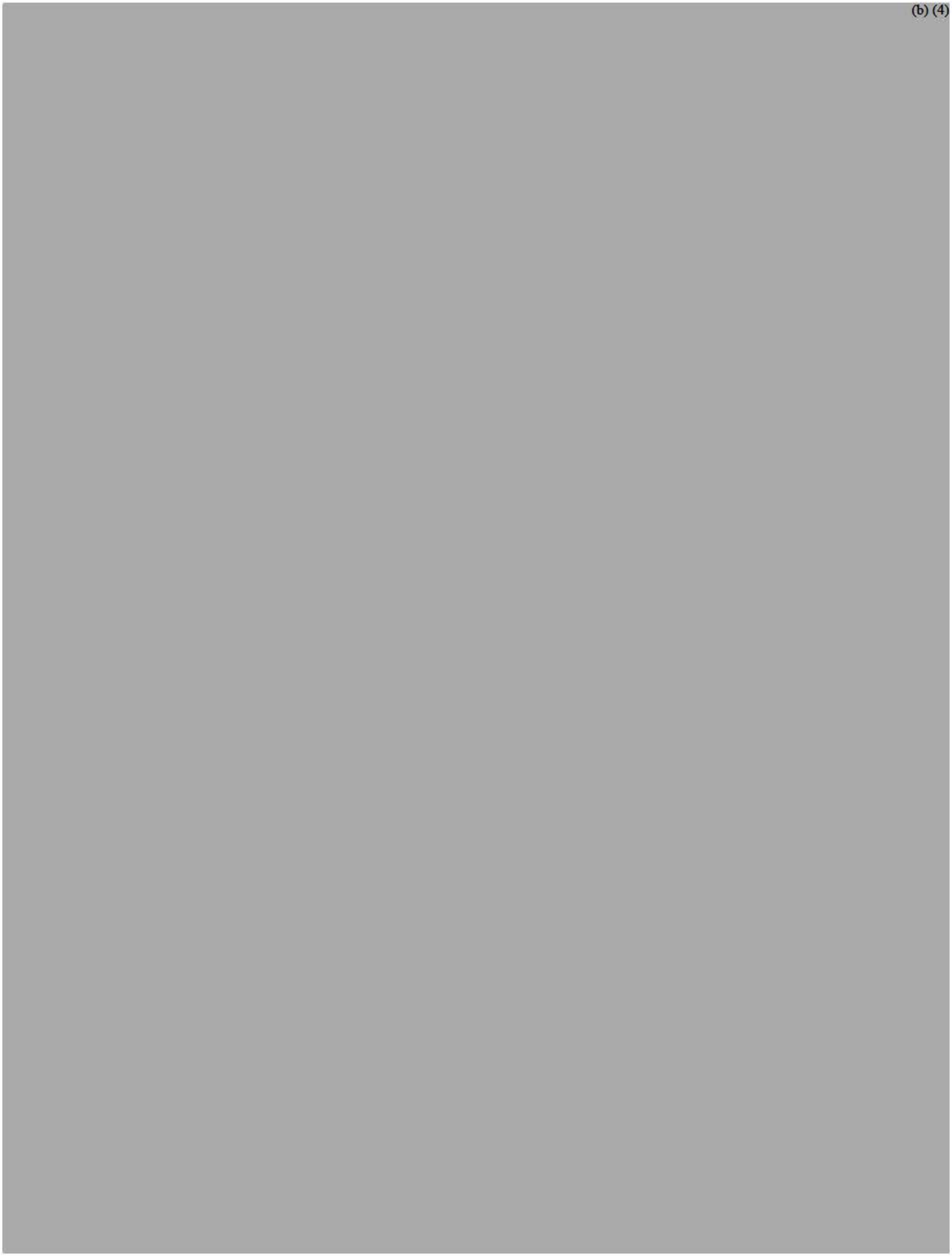

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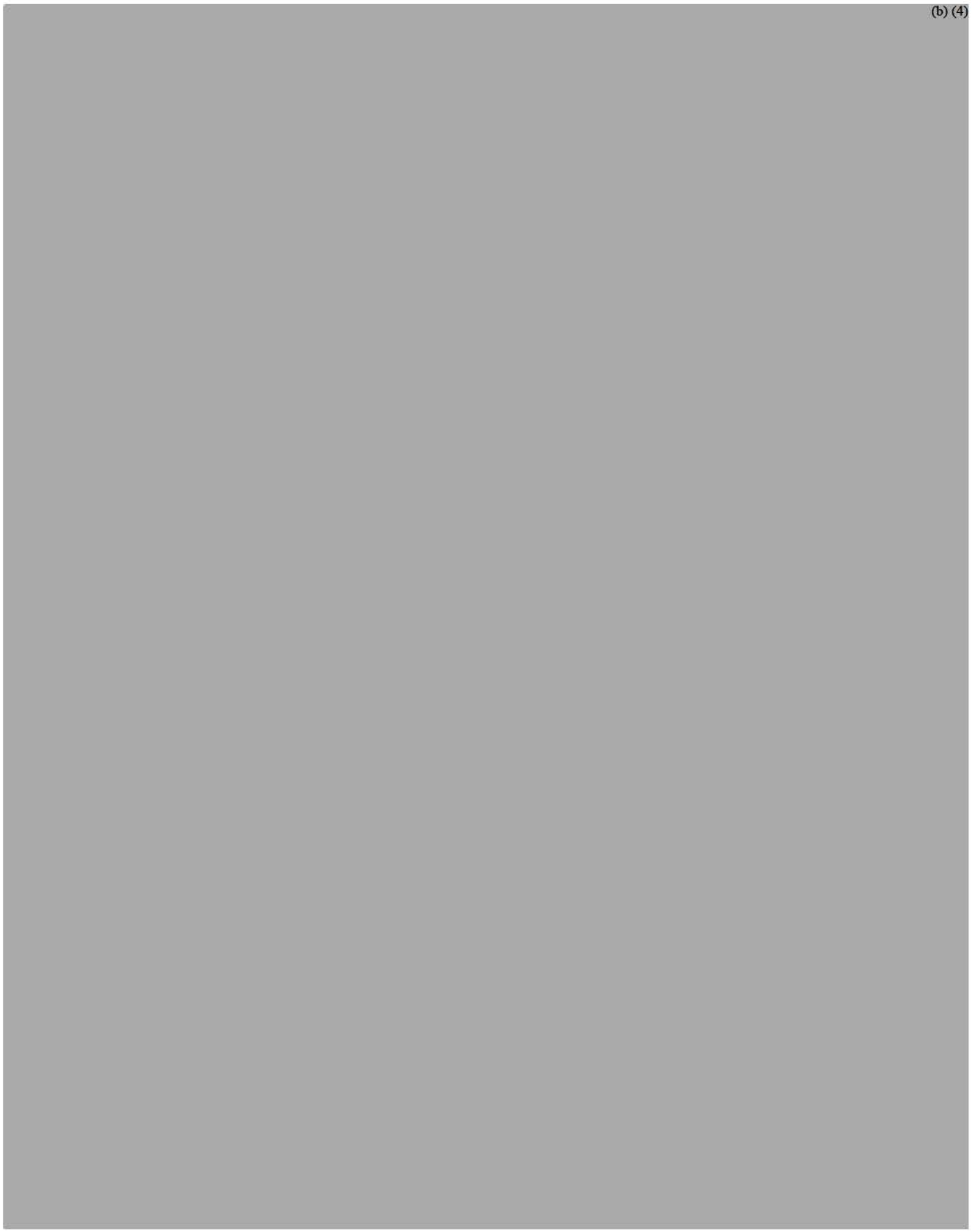

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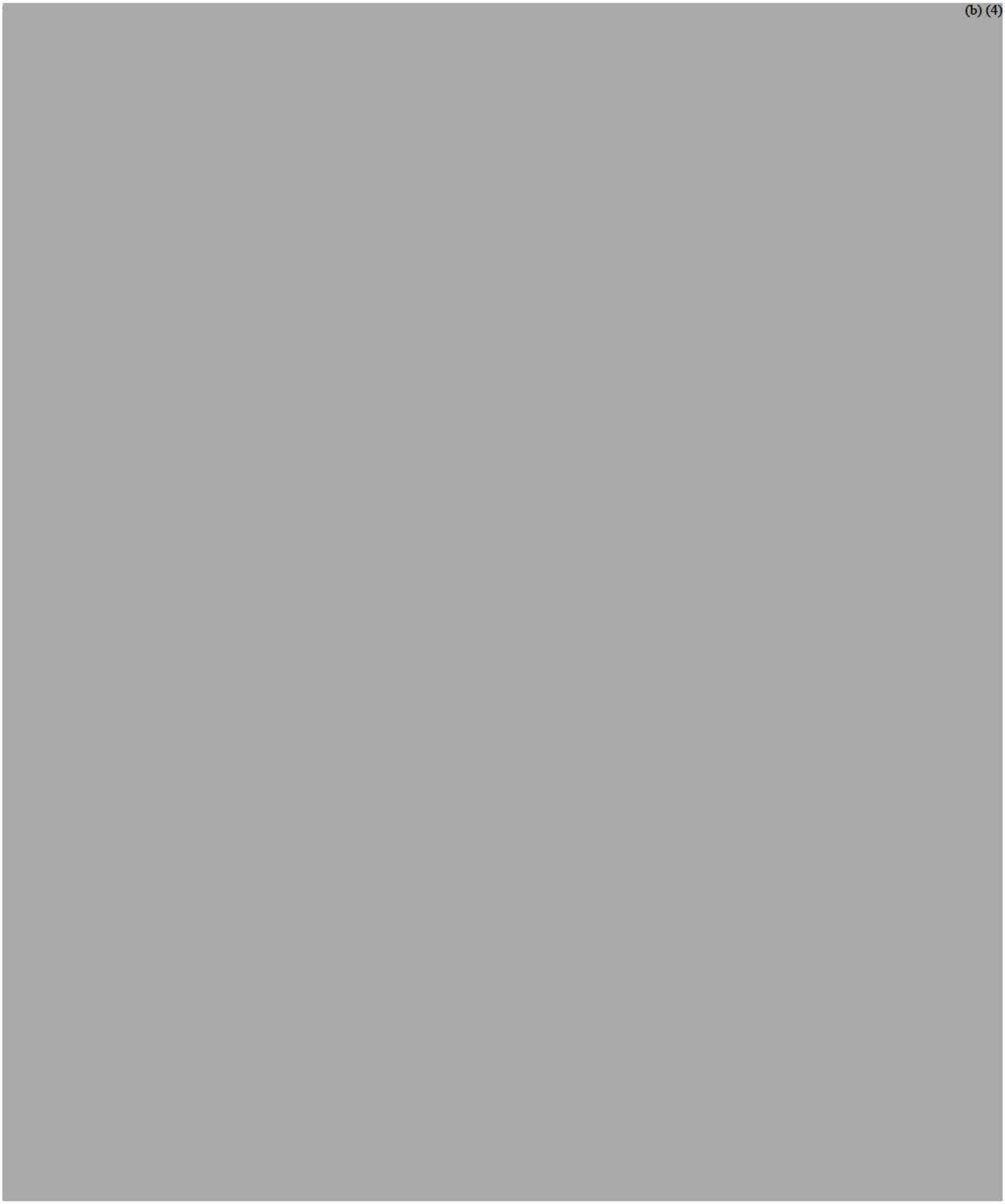

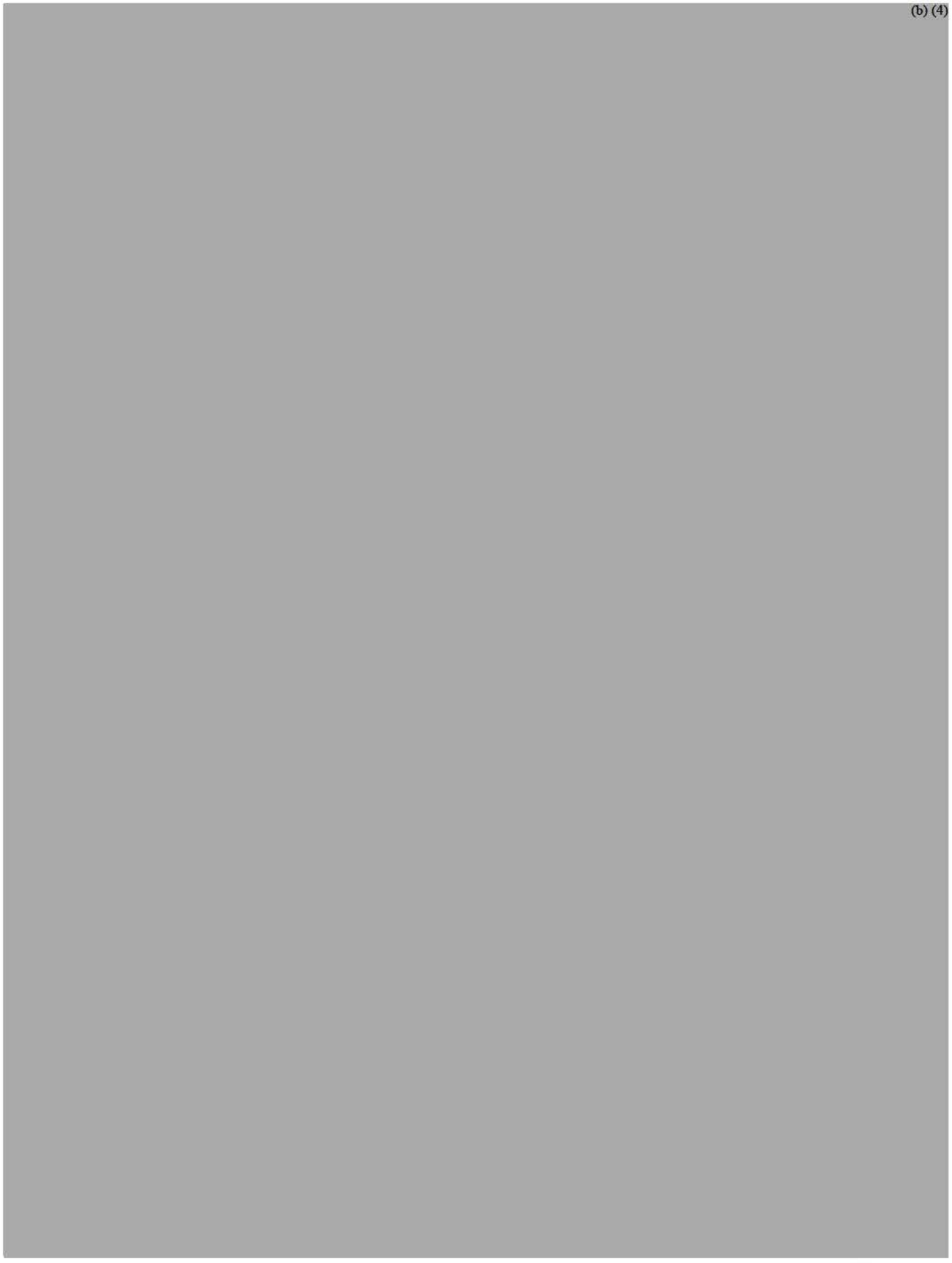

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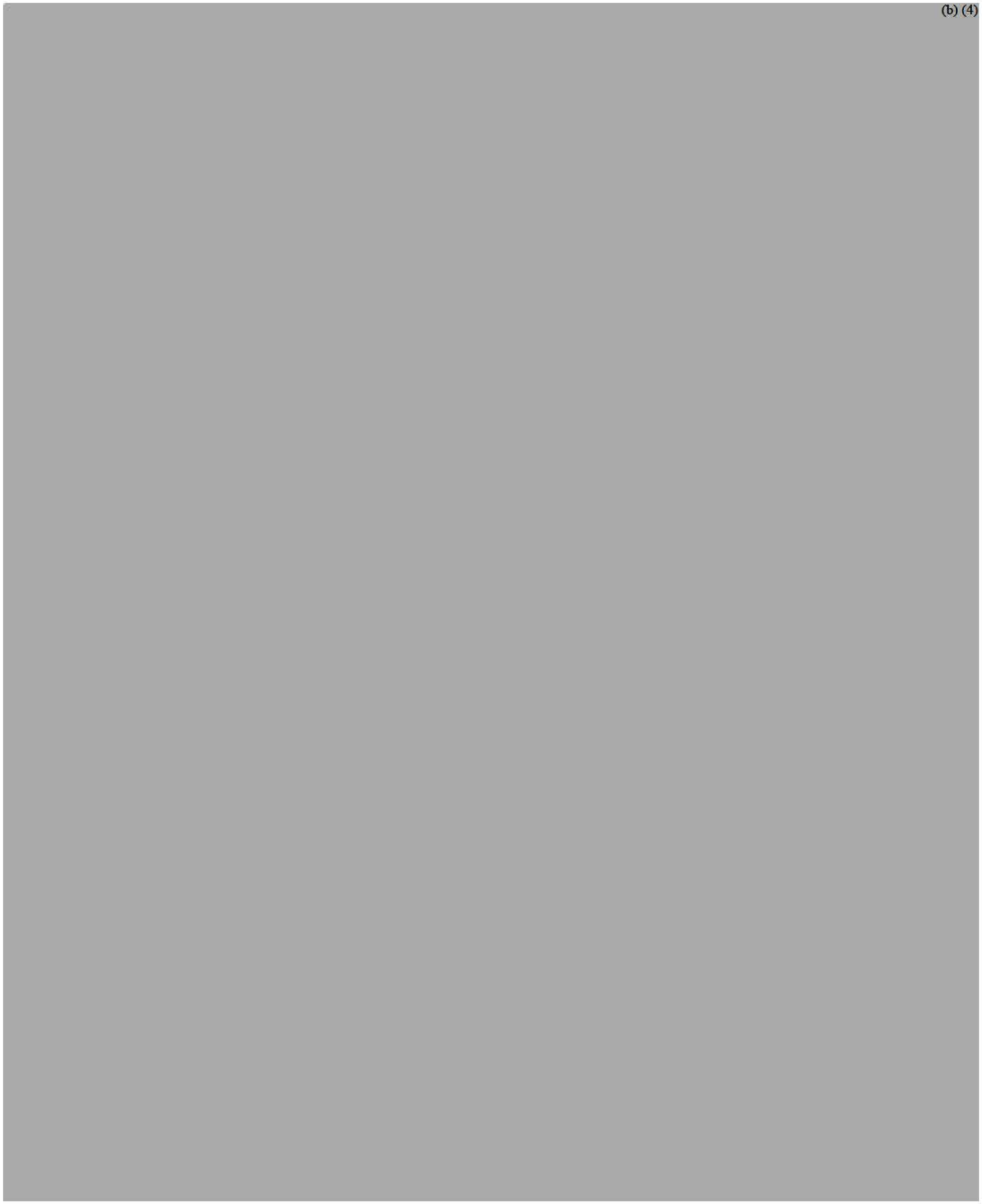

From: Conrad, Patricia (NIH/NIAID) [E]
Sent: Fri, 1 Nov 2013 08:16:50 -0400
To: Folkers, Greg (NIH/NIAID) [E]
Subject: RE: Virologica Sinica: Bats as animal reservoirs for the #SARS coronavirus: hypothesis proved after 10 years of virus hunting http://bit.ly/1cu0V4R

I think we need more slides like this…its too cute!

Patricia L. Conrad
Special Assistant to the DIrector

From: Folkers, Greg (NIH/NIAID) [E]
Sent: Friday, November 01, 2013 7:43 AM
Subject: Virologica Sinica: Bats as animal reservoirs for the #SARS coronavirus: hypothesis proved after 10 years of virus hunting http://bit.ly/1cu0V4R

Virologica Sinica
October 2013

Bats as animal reservoirs for the SARS coronavirus: hypothesis proved after 10 years of virus hunting

- Manli Wang,
- Zhihong Hu

Download PDF (347 KB)

Abstract

Recently, the team led by Dr. Zhengli Shi from Wuhan Institute of Virology, Chinese Academy of Sciences, and Dr. Peter Daszak from Ecohealth Alliance identified SL-CoVs in Chinese horseshoe bats that were 95% identical to human SARS-CoV and were able to use human angiotensin-converting enzyme 2 (ACE2) receptor for docking and entry. Remarkably, they isolated the first known live bat SL-CoV that replicates in human and related cells. Their findings provide clear evidence that some SL-CoVs circulating in bats are capable of infecting and replicating in human (Ge X Y, et al., 2013).

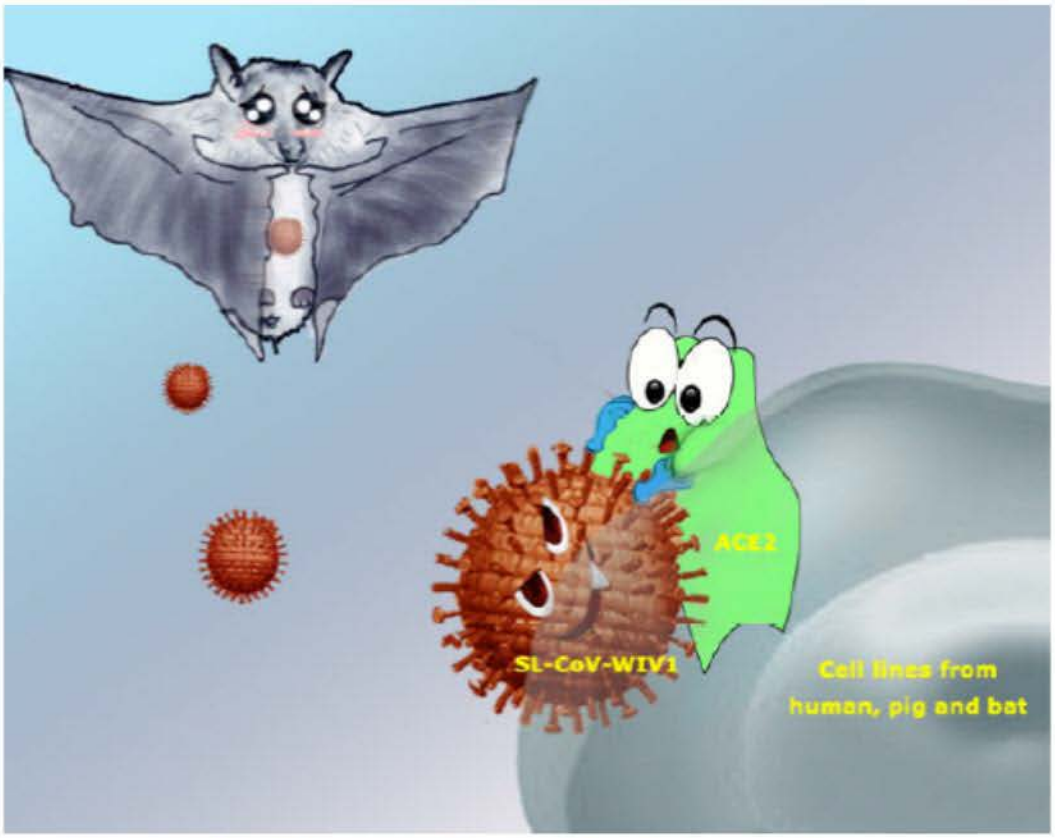

Fig. 1 Bat SL-CoV-WIV1 uses ACE2 to directly infect human cells.
A newly isolated wild-type bat SL-CoV-WIV1 is found to use ACE2 as a cellular entry receptor and replicate in human alveolar basal epithelial cells (A549), pig kidney-15 cells (PK15) and Chinese horseshoe bat kidney cells (RSKT). (Figure provided by Meng Wang, Wuhan Institute of Virology.)

From: Folkers, Greg (NIH/NIAID) [E]
Sent: Tue, 3 Nov 2015 18:02:02 +0000
To: Doepel, Laurie (NIH/NIAID) [E]
Subject: RE: Forthcoming Nature Medicine paper

Thanks
Looks interesting

From: Doepel, Laurie (NIH/NIAID) [E]
Sent: Tuesday, November 03, 2015 12:56 PM
To: Folkers, Greg (NIH/NIAID) [E] (b) (6)
Subject: FW: Forthcoming Nature Medicine paper

Not sure if you are in this long list, but in case not, just fyi

---

From: Barnstone, David [mailto:David.Barnstone@us.nature.com]
Sent: Monday, November 02, 2015 6:30 PM
To: endeavors@unc.edu; katie_obrien@med.unc.edu; spurrk@email.unc.edu; Mark.Derewicz@unch.unc.edu; bulletin@mail.casipm.ac.cn; david_cameron@hms.harvard.edu; (b) (6); Jake_Miller@hms.harvard.edu; susan_karcz@hms.harvard.edu; Elizabeth_Cooney@hms.harvard.edu; stephanie_dutchen@hms.harvard.edu; Stover, Kathy (NIH/NIAID) [E] (b) (6); Hoffman, Hillary (NIH/NIAID) [E] (b) (6); Huynh, Linda (NIH/NICHD) [E] (b) (6); Routh, Jennifer (NIH/NIAID) [E] (b) (6); Doepel, Laurie (NIH/NIAID) [E] (b) (6); Pekoc, Ken (NIH/NIAID) [E] (b) (6); Leifman, Laura Sivitz (NIH/NIAID) [E] (b) (6); NIAID NEWS (NIH/NIAID) (b) (6); Oplinger, Anne (NIH/NIAID) [E] (b) (6); Rancourt, Anne (NIH/NIAID) [E] (b) (6); NIAINFO (NIH/NIA) <niainfo@mail.nih.gov>; Cahan, Vicky (NIH/NIA) [E] (b) (6); Vaughn, Margaret (NIH/NIA/ERP) [E] (b) (6); Burklow, John (NIH/OD) [E] (b) (6); Myles, Renate (NIH/OD) [E] (b) (6); Fine, Amanda (NIH/OD) [E] (b) (6); Fritz, Craig (NIH/OD) [E] (b) (6); Jackson, Calvin (NIH/OD) [E] (b) (6); (b) (6); Harris, Mary (NIH/NIDDK) [E] (b) (6)
Subject: Forthcoming Nature Medicine paper

Dear Colleague,

I am writing to inform you that **'SARS-like cluster of circulating bat coronaviruses pose threat for human emergence' has been scheduled for Advance Online Publication (AOP) on *Nature Medicine*'s website at 1600 London time / 1100 US Eastern Time on 09 November 2015**. If you wish to see the paper, the author(s) should be able to provide you with a copy, and also to confirm that this title (taken from an early proof of the paper) remains unaltered.

You are receiving this letter because one or more of the authors are affiliated to your institution and/or because your organization provided funding for the research.

The full listing of authors and their affiliations for this paper is as follows:

Vineet D Menachery[1], Boyd L Yount Jr[1], Kari Debbink[1,2], Sudhakar Agnihothram[3], Lisa E Gralinski[1], Jessica A Plante[1], Rachel L Graham[1], Trevor Scobey[1], Xing-Yi Ge[4], Eric F Donaldson[1], Scott H Randell[5,6], Antonio Lanzavecchia[7], Wayne A Marasco[8,9], Zhengli-Li Shi[4] & Ralph S Baric[1,2]

[1]Department of Epidemiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

[2]Department of Microbiology and Immunology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

[3]National Center for Toxicological Research, Food and Drug Administration, Jefferson, Arkansas, USA

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[5]Department of Cell Biology and Physiology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

[6]Cystic Fibrosis Center, Marsico Lung Institute, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

[7]Institute for Research in Biomedicine, Bellinzona Institute of Microbiology, Zurich, Switzerland

[8]Department of Cancer Immunology and AIDS, Dana-Farber Cancer Institute, Harvard Medical School, Boston, Massachusetts, USA

[9]Department of Medicine, Harvard Medical School, Boston, Massachusetts, USA

The following funding acknowledgements from the authors appear at the end of the paper:

Research in this manuscript was supported by grants from the National Institute of Allergy & Infectious Disease and the National Institute of Aging of the US National Institutes of Health (NIH) under awards U19AI109761 (R.S.B.), U19AI107810 (R.S.B.), AI085524 (W.A.M.), F32AI102561 (V.D.M.) and K99AG049092 (V.D.M.), and by the National Natural Science Foundation of China awards 81290341 (Z.-L.S.) and 31470260 (X.-Y.G.). Human airway epithelial cultures were supported by the National Institute of Diabetes and Digestive and Kidney Disease of the NIH under award NIH DK065988 (S.H.R.).

materials, such as images or videos, so they can follow up stories of interest. The authors for all papers are indexed geographically so journalists can report on research from their own region.

We would be delighted to cooperate with you in ensuring maximum publicity for this paper. You may send out an embargoed press release to trusted contacts from Tuesday (six days before publication).

Please do not post to third-party internet journalist resource sites (such as EurekAlert or AlphaGalileo) until 96 hours before publication.

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E-mail: travis.taylor@nature.com, Tel: +44 20 7843 4658

Yours sincerely,
David Barnstone
Press Officer, *Nature*

From: Folkers, Greg (NIH/NIAID) [E]
Sent: Mon, 27 Jan 2020 23:24:58 +0000
To: Routh, Jennifer (NIH/NIAID) [E];Fauci, Anthony (NIH/NIAID) [E]
Cc: Billet, Courtney (NIH/NIAID) [E];Stover, Kathy (NIH/NIAID) [E];Conrad, Patricia (NIH/NIAID) [E];Marston, Hilary (NIH/NIAID) [E];Lerner, Andrea (NIH/NIAID) [E]
Subject: RE: For review (due to HHS for White House by 8:30 tonight): press conference talking points
Attachments: Talking Points for NIAID Director Dr. Fauci.docx

As a place folder looks good to me.
+ Andrea who is the lead on a CoV talk ASF is giving on Tuesday

Also --- when talking about CoV (not necessarily in this venue) we have on our team (Vincent and folks we fund, Peter Daszak, Ralph Baric, Ian Lipkin, etc.) probably the world's experts non-human coronaviruses.

From David M -- EcoHealth group (Peter Daszak et al), has for years been among the biggest players in coronavirus work, also in collaboration with Ralph Baric, Ian Lipkin and others.

NIAID has funded Peter's group for coronavirus work in China for the past 5 years through R01 1R01AI110964: "Understanding the Risk of Bat Coronavirus Emergence". That's now been renewed, with a specific focus to identify cohorts of people highly exposed to bats in China, and work out if they're getting sick from CoVs. Erik Stemmy is the Program Officer. Collaborators include Wuhan Institute of Virology (currently working on the nCoV), and Ralph Baric. The results of the work to date include:

(b) (5)

- Discovered Swine Acute Diarrheal Syndrome Virus (SADS-CoV) killing >25,000 pigs in Guangdong Province (Published in *Nature*)
- Found SARS-related CoVs that can bind to human cells (Published in *Nature*), and that cause SARS-like disease in humanized mouse models.

(b) (5)

Also – prior to the above R01, Peter's folks worked under an R01 with Eun-Chung Park as Program Officer on viral discovery in bats, and originally identified SARS-CoV as having a likely origin in bats (published in *Science*)

From: Routh, Jennifer (NIH/NIAID) [E] (b) (6)
Sent: Monday, January 27, 2020 6:14 PM
To: Fauci, Anthony (NIH/NIAID) [E] (b) (6)
Cc: Billet, Courtney (NIH/NIAID) [E] (b) (6); Stover, Kathy (NIH/NIAID) [E] (b) (6); Folkers, Greg (NIH/NIAID) [E] (b) (6); Conrad, Patricia (NIH/NIAID) [E] (b) (6); Marston, Hilary (NIH/NIAID) [E] (b) (6)
Subject: For review (due to HHS for White House by 8:30 tonight): press conference talking points

Dr. Fauci –

You will be making brief remarks at the HHS press conference tomorrow. HHS has requested your talking points by 8:30 tonight. (They are really just a placeholder for the White House to have something and so they are not surprised by any news). I have attached proposed points and pasted them below.

Please let me know if you have edits. I will send the final version to HHS tonight.

Thanks,
Jen

Talking Points for NIAID Director Anthony S. Fauci, M.D.
HHS Press Conference on Coordinated Public Health Response to 2019 Novel Coronavirus

(b) (5)

(b) (5)

Jennifer Routh [E]
News and Science Writing Branch
Office of Communications and Government Relations
National Institute of Allergy and Infectious Diseases (NIAID)
NIH/HHS
31 Center Drive Room 7A17C
Bethesda, MD 20892
Direct: (b) (6)
(b) (6)

Talking Points for NIAID Director Anthony S. Fauci, M.D.

HHS Press Conference on Coordinated Public Health Response to 2019 Novel Coronavirus

(b) (5)

From: Handley, Gray (NIH/NIAID) [E]
Sent: Tue, 10 Mar 2020 02:54:57 +0000
To: Chen, Ping (NIH/NIAID) [E]
Subject: FW: China sample sharing

Ping, can we have a conversation about this in the morning sometime? Thanks. Gray

---

From: Chandrasekera, Ruvani (OS/ASPR/SPPR) (b) (6)
Sent: Monday, March 9, 2020 8:26 PM
To: Handley, Gray (NIH/NIAID) [E] (b) (6)
Cc: Marston, Hilary (NIH/NIAID) [E] (b) (6)
Subject: RE: China sample sharing

(b) (5)

Ruvani

Ruvani Chandrasekera

HHS/ASPR/ International Policy
Office: (b) (6) | Cell: (b) (6)

From: Handley, Gray (NIH/NIAID) [E] (b) (6)
Sent: Monday, March 9, 2020 4:20 PM
To: Chandrasekera, Ruvani (OS/ASPR/SPPR) (b) (6)
Cc: Marston, Hilary (NIH/NIAID) [E] (b) (6)
Subject: RE: China sample sharing

Ruvani, (b) (5)

Gray

From: Chandrasekera, Ruvani (OS/ASPR/SPPR) (b) (6)
Sent: Monday, March 9, 2020 2:48 PM
To: Handley, Gray (NIH/NIAID) [E] (b) (6)
Cc: Marston, Hilary (NIH/NIAID) [E] (b) (6)
Subject: RE: China sample sharing

Good afternoon Dr. Handley,
It was nice to meet you in person today. (b) (5)

(b) (5)

What are your thoughts on this?
Ruvani

Ruvani Chandrasekera
HHS/ASPR/ International Policy
Office: (b) (6) | Cell: (b) (6)

-----Original Appointment-----
From: (b) (6)
Sent: Thursday, March 5, 2020 10:12 AM
To: (b) (6); Chandrasekera, Ruvani (OS/ASPR/SPPR)
Subject: FW: China sample sharing
When: Monday, March 9, 2020 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: SA-22, 1800 G St NW, suite (b) (6)

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From: (b) (6)
Sent: Thursday, March 5, 2020 8:53 AM
To: (b) (6); Handley, Gray (NIH/NIAID) [E]; Black, Jodi (NIH/OD) [E]; Koo, Han (OS/OGA) (CTR); Seedorff, Jennifer E; Lucera, Mark B; Frisk, Megan L; MacDonald, David L; Warner, (b) (6) (b) (6); (b) (6); Gulati, Neetu; Elvander, Erika (OS/OGA); Stewart, Jessica L. (HHS/OS/OGA)
Cc: Williams, Nekisha (NIH/NIAID) [C]; Adomako, Melissa (NIH/NIAID) [C]
Subject: China sample sharing
When: Monday, March 9, 2020 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
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Lucia

From: Handley, Gray (NIH/NIAID) [E]
Sent: Wed, 11 Mar 2020 13:36:48 +0000
To: Chen, Ping (NIH/NIAID) [E]
Subject: FW: 18-WUHAN-38.eml (002).pdf
Attachments: 18-WUHAN-38.eml (002).pdf

(b) (5)

Thanks. G

From: Sizemore, Christine (NIH/FIC) [E] (b) (6)
Sent: Tuesday, March 10, 2020 4:58 PM
To: Dominique, Joyelle (NIH/NIAID) [E] (b) (6)
Cc: Handley, Gray (NIH/NIAID) [E] (b) (6)
Subject: 18-WUHAN-38.eml (002).pdf

Hi Joyelle, you have seen that cable, right?
C

UNCLASSIFIED
SBU

MRN:	18 WUHAN 38
Date/DTG:	Apr 19, 2018 / 190551Z APR 18
From:	AMCONSUL WUHAN
Action:	WASHDC, SECSTATE *ROUTINE*
E.O.:	13526
TAGS:	SHLH, PGOV, CN, PREL, TBIO, KGHI, CDC, EAID, KHIV, IN, JP, TW, TSPL, PINS, SENV
Captions:	SENSITIVE
Reference:	A) 18 BEIJING 138 B) 17 BEIJING 2458 C) 11 MUMBAI 630 D) 17 TOKYO 716 E) 13 SEOUL 790
Subject:	China Virus Institute Welcomes More U.S. Cooperation on Global Health Security

1. (SBU) **Summary with Comment:** China's Wuhan Institute of Virology, a global leader in virus research, is a key partner for the United States in protecting global health security. Its role as operator of the just-launched Biosafety Level 4 (or "P4") lab -- the first such lab in China -- opens up even more opportunities for expert exchange, especially in light of the lab's shortage of trained staff (Ref A). (b) (5) [redacted] **End Summary with Comment.**

2. (U) Wuhan Institute of Virology researchers and staff gave an overview of the lab and current cooperation with the United States to visiting Environment, Science, Technology and Health Counsellor Rick Switzer and Consulate Wuhan Consul General Jamie Fouss in late March. In the last year, the institute has also hosted visits from the National Institutes of Health (NIH), National Science Foundation, and experts from the University of Texas Medical Branch in Galveston. The institute reports to the Chinese Academy of Sciences in Beijing.

P4 Lab is Open and Transparent, Officials Emphasize

3. (SBU) The Wuhan P4 lab, referring to labs with the highest level of safety precautions, became fully operational and began working with live viruses early this year. Institute officials said they believed it is the only operational P4 lab in Asia aside from a U.S. Centers for Disease

Control (CDC)-supported facility in Pune, India (Ref C). China plans to stand up a second P4 lab in Harbin. Institute officials said Japan's biosafety labs are "old" and lack cutting-edge equipment, so they consider Japan's labs to be "P3 Plus" (*Note*: the Japanese government says it has one P4-level lab in the Tokyo suburbs, though its activities are limited, and Japan is building a new P4 lab in Nagasaki, see Ref D. Taiwan operates at least one P4 lab. South Korea was close to opening a P4 lab as of last year, see Ref E. *End Note*.) Wuhan's lab is located about 20 miles from the city center in Zhengdian district, and the institute plans to gradually consolidate its other training, classroom and lab facilities at that location.

4. (U) Officials described the lab as a "regional node" in the global biosafety system and said it would play an emergency response role in an epidemic or pandemic. The lab's English brochure highlighted a national security role, saying that it "is an effective measure to improve China's availability in safeguarding national bio-safety if [a] possible biological warfare or terrorist attack happens."

5. (SBU) Institute officials said there would be "limited availability" for international and domestic scientists who had gone through the necessary approval process to do research at the lab. They stressed that the lab aimed to be a "worldwide, open platform" for virology. They said they welcomed U.S. Centers for Disease Control (CDC) experts, noting that the Chinese Academy of Sciences was not strong on human disease expertise, having only focused on it in the last 15 years, after the SARS outbreak. A Wuhan-based French consulate official who works on science and technology cooperation with China also emphasized that the lab, which was initiated in 2004 as a France-China joint project, was meant to be "open and transparent" to the global scientific community. "The intent was to set up a lab to international standards, and open to international research," he said. French experts have provided guidance and biosafety training to the lab, which will continue, the French official said. Institute officials said that France provided the lab's design and much of its technology, but that it is entirely China-funded and has been completely China-run since a "handover" ceremony in 2016.

6. (U) In addition to French assistance, experts from the NIH-supported P4 lab at the University of Texas Medical Branch in Galveston have trained Wuhan lab technicians in lab management and maintenance, institute officials said. The Wuhan institute plans to invite scientists from the Galveston lab to do research in Wuhan's lab. One Wuhan Institute of Virology researcher trained for two years at the Galveston lab, and the institute also sent one scientist to U.S. CDC headquarters in Atlanta for six months' work on influenza.

NIH-Supported Research Revises SARS Origin Story

7. (U) NIH was a major funder, along with the Natural Science Foundation of China (NSFC), of SARS research by the Wuhan Institute of Virology's (b) (6) This lends weight to the theory that SARS originated in bat populations before jumping first to civet cats (likely via bat feces) and then to humans, (b) (6)

(b) (6) team has provided support in statistical modeling to assess the risk of more coronaviruses like SARS crossing over to human populations.

Ready to Help with the Global Virome Project

8. (U) Institute officials expressed strong interest in the Global Virome Project (GVP), and said Chinese funding for the project would likely come from Chinese Academy of Sciences funding already earmarked for One Belt, One Road-related initiatives. The GVP aims to launch this year as an international collaborative effort to identify within ten years virtually all of the planet's viruses that have pandemic or epidemic potential and the ability to jump to humans. "We hope China will be one of the leading countries to initiate the Global Virome Project," one Wuhan Institute of Virology official said. China attended a GVP unveiling meeting in January in Thailand and is waiting for more details on the initiative. The officials said that the Chinese government funds projects similar to GVP to investigate the background of viruses and bacteria. This essentially constituted China's own Virome Project, officials said, but they noted the program currently has no official name.

9. (SBU) The Wuhan Institute of Virology's (b) (6) is the (b) (6) (b) (6), which is designed to show "proof of concept" and be a forerunner to the Global Virome Project. (b) (6), with the EcoHealth Alliance (a New York City-based NGO that is working with the University of California, Davis to manage the (b) (6), recently planned to visit Wuhan to meet with (b) (6) noted that China has expressed interest in building the GVP database, which would put China in a leadership position. Other countries have confidence in China's ability to build such a database, but are skeptical on whether China could remain transparent as a "gatekeeper" for this information, (b) (6) said. (b) (6) expressed frustration with the slow progress so far in launching GVP, noting that the effort lacked funding sources, needed to hire a CEO, and would have to boost its profile at G7, G20 and other high-level international meetings.

U.S.-China Workshop Explores Research Partnerships

10. (U) The Institute also has ongoing collaboration with the U.S. National Science Foundation, including a just-concluded workshop in Shenzhen, involving about 40 scientists from the United States and China, on the topic of the "Ecology and Evolution of Infectious Diseases." Co-sponsored by the Natural Science Foundation of China (NSFC), (b) (6) (b) (6) (b) (6) The workshop explored opportunities for U.S.-China research cooperation in areas like using "big data" to predict emerging infectious diseases, climate change's effect on vector-borne diseases, and pathogen transmission between wildlife, domestic animals and humans.

11. (SBU) Some workshop participants also expressed skepticism about the Global Virome Project's (GVP) approach, saying that gaining a predictive understanding of viruses with pandemic potential would require going beyond the GVP's strategy of sample collection, to take an "ecological" approach that considers the virome beyond vertebrate systems to identify

mechanisms driving pathogen evolution. A follow-on workshop will be held in June at the University of Berkeley. NSF and NSFC hope to jointly announce a funding call for collaborative projects later this year.

Signature: FOUSS

Drafted By:	(b) (6)
Cleared By:	
Approved By:	
Released By:	
Info:	

Dissemination Rule: Archive Copy

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From: Chen, Ping (NIH/NIAID) [E]
Sent: Tue, 10 Mar 2020 04:15:32 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: Re: China sample sharing
Attachments: image001.png

Sure. I usually get in around 9 am.

Sent from my iPhone

On Mar 9, 2020, at 10:55 PM, Handley, Gray (NIH/NIAID) [E] (b) (6) wrote:

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Cc: Williams, Nekisha (NIH/NIAID) [C]; Adomako, Melissa (NIH/NIAID) [C]
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Lucia

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From: Chen, Ping (NIH/NIAID) [E]
Sent: Wed, 11 Mar 2020 14:00:43 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: Re: 18-WUHAN-38.eml (002).pdf

Gray,

(b) (5)

Hope this is helpful.

Ping

From: "Handley, Gray (NIH/NIAID) [E]" (b) (6)
Date: Wednesday, March 11, 2020 at 9:36 AM
To: "Chen, Ping (NIH/NIAID) [E]" (b) (6)
Subject: FW: 18-WUHAN-38.eml (002).pdf

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Cc: Handley, Gray (NIH/NIAID) [E] (b) (6)
Subject: 18-WUHAN-38.eml (002).pdf

Hi Joyelle, you have seen that cable, right?
C

From: Touchette, Nancy (NIH/NIAID) [E]
Sent: Wed, 15 Apr 2020 01:00:21 +0000
To: Handley, Gray (NIH/NIAID) [E];Marston, Hilary (NIH/NIAID) [E];Higgs, Elizabeth (NIH/NIAID) [E];Bushar, Nicholas (NIH/NIAID) [E];NIAID OGR CORE;Siddiqui, Sophia (NIH/NIAID) [E];Aboulhab, Jamila (NIH/NIAID) [E];Juompan, Laure (NIH/NIAID) [E];Reynolds, Steven (NIH/NIAID) [E];Babu, Subbaraman (NIH) [E];Chopra, Nandita (NIH/NIAID) [E];Kagan, Jonathan M. (NIH/NIAID) [E];Ossorio Goldman, Margarita (NIH/NIAID) [E];Taylor, Robert (NIH/NIAID) [C];Chen, Ping (NIH/NIAID) [E];NIAID BUGS
Subject: 4-14-2020 COVID-19 Daily Update
Attachments: April 14 2020 COVID-19 update FINAL.docx

COVID-19 Daily News Summary
Office of Global Research
April 14, 2020; Current as of 4:00 p.m., EST

Compiled by Nancy Touchette

The information in this summary, which is compiled from publicly sourced information, is for internal USG use only. The information in this report does not reflect the opinions of the National Institute of Allergy and Infectious Diseases (NIAID). NIAID shall not accept liability for any statements made that are the sender's own and not expressly made on behalf of the NIAID by one of its representatives.

WHO Situation Report (compiled daily): April 14

- ***1,844,863 confirmed cases globally (71,779 new)***
- ***117,021 deaths globally (5,369 new)***

U.S. CDC Update:

- ***Total U.S. Cases: 579,005***
- ***Total U.S. deaths: 22,252***

Johns Hopkins Coronavirus Resource Center

- **Globally**
  - ***1,956,077 confirmed cases***
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  - ***471,469 cases recovered***
- **United States**
  - ***572,689 confirmed cases***
  - ***23,134 deaths***
  - ***43,482 cases recovered***

RESEARCH NEWS

Epidemiology/modeling

- NIAID-supported scientists have developed a SARS-CoV-2 transmission model that predicts recurrent wintertime outbreaks of SARS-CoV-2 after the initial, most severe pandemic wave. Prolonged or intermittent social distancing may be necessary into 2022, according to findings published in the

April 14, 2020 issue of *Science*. Even if the virus is eliminated, SARS-CoV-2 surveillance should be maintained since a resurgence in contagion could be possible as late as 2024, according to authors. (*Science*, April 14, 2020; DOI: 10.1126/science.abb5793).

Clinical

- Researchers in South Korea retrieved data related to 8,266 patients with laboratory-confirmed SARS-CoV-2 and examined the association of angiotensin receptor blockers (ARBs) or angiotensin-converting enzyme (ACE) inhibitors on SARS-CoV-2-related mortality. The researchers reported in the non-peer-reviewed *Lancet* journal *SSRN* that there were no adverse outcome of COVID-19 in patients prescribed with ARBs or ACE inhibitors, supporting the sustained use of ARBs and ACE inhibitors in SARS-CoV-2 infection. (*SSRN*: https://ssrn.com/abstract=3569837)
- Researchers collected data from 181 patients with SARS-CoV-2 pneumonia and requiring oxygen in four French hospitals to emulate a target trial aimed at assessing the effectiveness of hydroxychloroquine (HCQ) at 600 mg/day. 84 patients received HCQ within 48 hours of admission (HCQ group) and 97 did not (no-HCQ group). 20.2% patients in the HCQ group were transferred to the ICU or died within 7 days vs 22.1% in the no-HCQ. In the HCQ group, 2.8% of the patients died within 7 days vs 4.6% in the no-HCQ group and 27.4% vs. 24.1%, respectively, developed acute respiratory distress syndrome within 7 days. Eight patients receiving HCQ (9.5%) experienced electrocardiogram modifications requiring HCQ discontinuation. The researchers state that the results do not support the use of HCQ in patients hospitalized for SARS-CoV-2-positive hypoxic pneumonia (*medRxiv* https://doi.org/10.1101/2020.04.10.20060699)
- Researchers in China conducted a multicenter, open-label, randomized hydroxychloroquine (HCQ) controlled trial involving 150 patients hospitalized with COVID-19 at 16 treatment centers in China. 75 patients were assigned to HCQ plus standard of care (SOC) and 75 were assigned to SOC alone (control group). HCQ was administered with a loading dose of 1,200 mg daily for three days followed by a maintained dose of 800 mg daily for the remaining 2 or 3 weeks for mild/moderate or severe patients, respectively. The researchers conclude that HCQ did not result in a higher negative conversion rate but did result in a greater alleviation of clinical symptoms compared to patients receiving no drug. Adverse events were significantly increased in HCQ recipients but there was no apparent increase of serious adverse events. (*medRxiv;* https://doi.org/10.1101/2020.04.10.20060558)

Treatments

- HHS's Biomedical Advanced Research and Development Authority (BARDA) is providing support to several non-government organizations to develop convalescent plasma and hyperimmune globulin immunotherapies from COVID-19 survivors:
    - The American Red Cross will collect, store, and distribute convalescent plasma donated by COVID-19 survivors.
    - Emergent Biosolutions will develop and manufacture COVID-19 hyperimmune globulin (COVID-HIG) and work with NIAID to include the COVID-HIG in future clinical trials.
    - Grifols will collect plasma through a network of more than 250 U.S. plasma donor centers to manufacture COVID-19 convalescent plasma and hyperimmune globulin.
    - SAb Biotherapeutics will develop SAB-185, an immunotherapy that relies on a platform technology to produce human antibodies without donated blood; BARDA may support a Phase 1 trial. (HHS, April 14, 2020).

- FDA has authorized Athersys, Inc. to initiate a Phase 2/3 study to assess the safety and efficacy of MultiStem® therapy in subjects with moderate to severe acute respiratory distress syndrome (ARDS) caused by COVID-19. This multicenter study featuring an open-label lead-in will be followed by a double-blinded, randomized, placebo-controlled Phase 2/3 portion. (Atherys, www.athersys.com)

Vaccines

- NIAID has begun enrolling subjects to receive the highest dose of the mRNA-1273 vaccine, developed by NIAID and Moderna. The Phase I study, led by NIAID, has three arms that are administering doses of 25 mcg, 100 mcg and 250 mcg. NIAID began dosing the first patients on March 16. (Fierce Biotech, April 14, 2020).
- Sanofi and GSK announced April 14 an agreement to collaborate on developing an adjuvanted COVID-19 vaccine. Sanofi will contribute its recombinant SARS-CoV-2 protein antigen in a baculovirus expression platform. GSK will contribute its pandemic adjuvant, which could reduce the amount of vaccine required per dose. The companies plan to initiate Phase I clinical trials in the second half of 2020. (GSK, Sanofi, April 14, 2020).
- China has approved clinical trials for two more experimental vaccines to combat the novel coronavirus. China's state food and drug administration approved one vaccine developed by Sinovac Biotech April 13. Another vaccine, developed by the Wuhan Institute of Biological Products and the Wuhan Institute of Virology, was approved on April 12. Beijing approved the first trial for a vaccine developed by the Academy of Military Medical Sciences and CanSino Bio March 16. (*Agence France-Presse*, April 14, 2020).

Immunology/Virology/Laboratory

- The SARS-CoV-2 spike (S) protein mediates entry of SARS-CoV-2 into cells expressing the angiotensin-converting enzyme 2 (ACE2) through its receptor-binding domain (RBD). Antibodies to the RBD domain of SARS-CoV which emerged in 2002-2003, potently neutralize SARS-CoV S-protein-mediated entry, and the presence of anti-RBD antibodies correlates with neutralization in SARS-CoV-2 convalescent sera. Researchers at Scripps and their collaborators show that immunization with the SARS-CoV-2 S-protein receptor binding protein (RBD) elicits a robust neutralizing antibody response in rodents. Importantly, anti-sera from immunized animals did not mediate antibody-dependent enhancement (ADE) of S-protein-mediated entry under conditions in which Zika virus ADE was readily observed. These data suggest that an RBD-based vaccine for SARS-CoV-2 could be safe and effective. (*bioRxiv*, April 14, 2020; **doi:** https://doi.org/10.1101/2020.04.10.036418)

Resources

- The NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) have launched a new portal that highlights CEIRS Contributions to the COVID-19 Response. The CEIRS Network is actively involved in responding to the COVID-19 outbreak and the portal serves as a resource for information about these response efforts and a source for CEIRS-generated resources for other CEIRS members and the broader scientific community. http://www.niaidceirs.org/covid-19/

RESEARCH PUBLICATIONS
NIAID-supported publications:

- Kissler SM, Tedijanto C, Goldstein E, Grad YH, and Lipsitch M. Projecting the transmission dynamics of SARS-CoV-2 through the post-pandemic period. *Science* (April 14, 2020). DOI: 10.1126/science.abb5793
  - **NIAID grant: AI007535**

PubMed Query:

- April 14, 2020: https://www.ncbi.nlm.nih.gov/pubmed/?cmd=historysearch&querykey=1

Non-peer-reviewed Publications:

- ***MedRxiv* and *BioRxiv* Query**
  - April 13-14, 2020: https://bit.ly/3a8G2Lt

OTHER REFERENCES:

- WHO situation report: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200413-sitrep-84-covid-19.pdf?sfvrsn=44f511ab_2
- WHO Dashboard ARC GIS MAP: https://who.sprinklr.com/
- JHU Coronavirus Resource Center: https://coronavirus.jhu.edu/map.html
- CDC Coronavirus Web Page: https://www.cdc.gov/coronavirus/2019-ncov/whats-new-all.html
- CDC Travel COVID-19 Recommendations by Country: https://www.cdc.gov/coronavirus/2019-ncov/travelers/map-and-travel-notices.html
- Milken COVID-19 vaccine and treatment tracker: https://milkeninstitute.org/covid-19-tracker
- New York times Coronavirus deaths by U.S. state and country over time: Daily tracking https://www.nytimes.com/interactive/2020/03/21/upshot/coronavirus-deaths-by-country.html
- FDA EUAs related to COVID-19: https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization#2019-ncov
- GHTC tracker for U.S. government-funded COVID-19 R&D: https://www.ghtcoalition.org/resources-item/covid-19-r-d-tracker
- CEIRS Contributions to the COVID-19 Response http://www.niaidceirs.org/covid-19/

Nancy
Nancy Touchette, Ph.D.
Health Research Program and Policy Analyst
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National Institutes of Health
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5601 Fishers Lane Rm 1E51B MSC 9802
Bethesda MD 20892-9802
Tel: (b) (6)
Fax: 301-480-2954
E-mail: (b) (6)

COVID-19 Daily News Summary
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April 14, 2020; Current as of 4:00 p.m., EST

Compiled by Nancy Touchette

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- NIAID-supported scientists have developed a SARS-CoV-2 transmission model that predicts recurrent wintertime outbreaks of SARS-CoV-2 after the initial, most severe pandemic wave. Prolonged or intermittent social distancing may be necessary into 2022, according to findings published in the April 14, 2020 issue of *Science*. Even if the virus is eliminated, SARS-CoV-2 surveillance should be maintained since a resurgence in contagion could be possible as late as 2024, according to authors. (*Science*, April 14, 2020; DOI: 10.1126/science.abb5793).

Clinical

- Researchers in South Korea retrieved data related to 8,266 patients with laboratory-confirmed SARS-CoV-2 and examined the association of angiotensin receptor blockers (ARBs) or angiotensin-converting enzyme (ACE) inhibitors on SARS-CoV-2-related mortality. The researchers reported in the non-peer-reviewed *Lancet* journal *SSRN* that there were no adverse

outcome of COVID-19 in patients prescribed with ARBs or ACE inhibitors, supporting the sustained use of ARBs and ACE inhibitors in SARS-CoV-2 infection. (*SSRN*: https://ssrn.com/abstract=3569837)

- Researchers collected data from 181 patients with SARS-CoV-2 pneumonia and requiring oxygen in four French hospitals to emulate a target trial aimed at assessing the effectiveness of hydroxychloroquine (HCQ) at 600 mg/day. 84 patients received HCQ within 48 hours of admission (HCQ group) and 97 did not (no-HCQ group). 20.2% patients in the HCQ group were transferred to the ICU or died within 7 days vs 22.1% in the no-HCQ. In the HCQ group, 2.8% of the patients died within 7 days vs 4.6% in the no-HCQ group and 27.4% vs. 24.1%, respectively, developed acute respiratory distress syndrome within 7 days. Eight patients receiving HCQ (9.5%) experienced electrocardiogram modifications requiring HCQ discontinuation. The researchers state that the results do not support the use of HCQ in patients hospitalized for SARS-CoV-2-positive hypoxic pneumonia (*medRxiv* https://doi.org/10.1101/2020.04.10.20060699)
- Researchers in China conducted a multicenter, open-label, randomized hydroxychloroquine (HCQ) controlled trial involving 150 patients hospitalized with COVID-19 at 16 treatment centers in China. 75 patients were assigned to HCQ plus standard of care (SOC) and 75 were assigned to SOC alone (control group). HCQ was administered with a loading dose of 1,200 mg daily for three days followed by a maintained dose of 800 mg daily for the remaining 2 or 3 weeks for mild/moderate or severe patients, respectively. The researchers conclude that HCQ did not result in a higher negative conversion rate but did result in a greater alleviation of clinical symptoms compared to patients receiving no drug. Adverse events were significantly increased in HCQ recipients but there was no apparent increase of serious adverse events. (*medRxiv;* https://doi.org/10.1101/2020.04.10.20060558)

Treatments

- HHS's Biomedical Advanced Research and Development Authority (BARDA) is providing support to several non-government organizations to develop convalescent plasma and hyperimmune globulin immunotherapies from COVID-19 survivors:
    - The American Red Cross will collect, store, and distribute convalescent plasma donated by COVID-19 survivors.
    - Emergent Biosolutions will develop and manufacture COVID-19 hyperimmune globulin (COVID-HIG) and work with NIAID to include the COVID-HIG in future clinical trials.
    - Grifols will collect plasma through a network of more than 250 U.S. plasma donor centers to manufacture COVID-19 convalescent plasma and hyperimmune globulin.
    - SAb Biotherapeutics will develop SAB-185, an immunotherapy that relies on a platform technology to produce human antibodies without donated blood; BARDA may support a Phase 1 trial. (HHS, April 14, 2020).
- FDA has authorized Athersys, Inc. to initiate a Phase 2/3 study to assess the safety and efficacy of MultiStem® therapy in subjects with moderate to severe acute respiratory distress syndrome (ARDS) caused by COVID-19. This multicenter study featuring an open-label lead-in will be followed by a double-blinded, randomized, placebo-controlled Phase 2/3 portion. (Atherys, www.athersys.com)

Vaccines

- NIAID has begun enrolling subjects to receive the highest dose of the mRNA-1273 vaccine, developed by NIAID and Moderna. The Phase I study, led by NIAID, has three arms that are administering doses of 25 mcg, 100 mcg and 250 mcg. NIAID began dosing the first patients on March 16. (Fierce Biotech, April 14, 2020).
- Sanofi and GSK announced April 14 an agreement to collaborate on developing an adjuvanted COVID-19 vaccine. Sanofi will contribute its recombinant SARS-CoV-2 protein antigen in a baculovirus expression platform. GSK will contribute its pandemic adjuvant, which could reduce the amount of vaccine required per dose. The companies plan to initiate Phase I clinical trials in the second half of 2020. (GSK, Sanofi, April 14, 2020).
- China has approved clinical trials for two more experimental vaccines to combat the novel coronavirus. China's state food and drug administration approved one vaccine developed by Sinovac Biotech April 13. Another vaccine, developed by the Wuhan Institute of Biological Products and the Wuhan Institute of Virology, was approved on April 12. Beijing approved the first trial for a vaccine developed by the Academy of Military Medical Sciences and CanSino Bio March 16. (*Agence France-Presse*, April 14, 2020).

Immunology/Virology/Laboratory

- The SARS-CoV-2 spike (S) protein mediates entry of SARS-CoV-2 into cells expressing the angiotensin-converting enzyme 2 (ACE2) through its receptor-binding domain (RBD). Antibodies to the RBD domain of SARS-CoV which emerged in 2002-2003, potently neutralize SARS-CoV S-protein-mediated entry, and the presence of anti-RBD antibodies correlates with neutralization in SARS-CoV-2 convalescent sera. Researchers at Scripps and their collaborators show that immunization with the SARS-CoV-2 S-protein receptor binding protein (RBD) elicits a robust neutralizing antibody response in rodents. Importantly, anti-sera from immunized animals did not mediate antibody-dependent enhancement (ADE) of S-protein-mediated entry under conditions in which Zika virus ADE was readily observed. These data suggest that an RBD-based vaccine for SARS-CoV-2 could be safe and effective. (*bioRxiv*, April 14, 2020; **doi:** https://doi.org/10.1101/2020.04.10.036418)

Resources

- The NIAID Centers of Excellence for Influenza Research and Surveillance (CEIRS) have launched a new portal that highlights CEIRS Contributions to the COVID-19 Response. The CEIRS Network is actively involved in responding to the COVID-19 outbreak and the portal serves as a resource for information about these response efforts and a source for CEIRS-generated resources for other CEIRS members and the broader scientific community. http://www.niaidceirs.org/covid-19/

RESEARCH PUBLICATIONS

NIAID-supported publications:

- Kissler SM, Tedijanto C, Goldstein E, Grad YH, and Lipsitch M. Projecting the transmission dynamics of SARS-CoV-2 through the post-pandemic period. *Science* (April 14, 2020). DOI: 10.1126/science.abb5793
  - **NIAID grant: AI007535**

PubMed Query:

- April 14, 2020: https://www.ncbi.nlm.nih.gov/pubmed/?cmd=historysearch&querykey=1

Non-peer-reviewed Publications:

- ***MedRxiv* and *BioRxiv* Query**
  - April 13-14, 2020: https://bit.ly/3a8G2Lt

OTHER REFERENCES:

- WHO situation report: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200413-sitrep-84-covid-19.pdf?sfvrsn=44f511ab_2
- WHO Dashboard ARC GIS MAP: https://who.sprinklr.com/
- JHU Coronavirus Resource Center: https://coronavirus.jhu.edu/map.html
- CDC Coronavirus Web Page: https://www.cdc.gov/coronavirus/2019-ncov/whats-new-all.html
- CDC Travel COVID-19 Recommendations by Country: https://www.cdc.gov/coronavirus/2019-ncov/travelers/map-and-travel-notices.html
- Milken COVID-19 vaccine and treatment tracker: https://milkeninstitute.org/covid-19-tracker
- New York times Coronavirus deaths by U.S. state and country over time: Daily tracking https://www.nytimes.com/interactive/2020/03/21/upshot/coronavirus-deaths-by-country.html
- FDA EUAs related to COVID-19: https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization#2019-ncov
- GHTC tracker for U.S. government-funded COVID-19 R&D: https://www.ghtcoalition.org/resources-item/covid-19-r-d-tracker
- CEIRS Contributions to the COVID-19 Response http://www.niaidceirs.org/covid-19/

From: Chen, Ping (NIH/NIAID) [E]
Sent: Wed, 15 Apr 2020 21:24:39 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: Re: Info for 5:30 call about the WIV cable

I tried to search for messages in my outlook for Oct 2017 and later, my inbox doesn't go that far. Will need to get IT help.

Ping

From: "Chen, Ping (NIH/NIAID) [E]" (b) (6)
Date: Wednesday, April 15, 2020 at 5:02 PM
To: "Handley, Gray (NIH/NIAID) [E]" (b) (6)
Subject: Info for 5:30 call about the WIV cable

Here is the conference call information: USA Toll-Free: (b) (4), (b) (5), (b) (6) International Toll: (b) (4), (b) (5), (b) (4) / Access Code: (b) (4), (b) (5), (b) (6)
Adrienne, Ron (CDC country director before R.J.), me, Rick, don't know who else Rick might have included. He said it is OK for you to join the call.

Talk to you soon.

Ping

From: Bernabe, Gayle (NIH/NIAID) [E]
Sent: Wed, 15 Apr 2020 22:00:31 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: RE: Wuhan Lab
Attachments: Re: trip report

Attached is Ping's trip report. I'll keep looking for more info.

From: Bernabe, Gayle (NIH/NIAID) [E]
Sent: Wednesday, April 15, 2020 5:48 PM
To: Handley, Gray (NIH/NIAID) [E] (b) (6)
Subject: RE: Wuhan Lab

Will do.

From: Handley, Gray (NIH/NIAID) [E] (b) (6)
Sent: Wednesday, April 15, 2020 5:26 PM
To: Bernabe, Gayle (NIH/NIAID) [E] (b) (6)
Subject: Wuhan Lab

Gayle, please check your files for messages from Ping back in October 2017 when she visited the Wuhan lab and sent us by e-mail information on it. Basically anything we can find on that grant and that lab.

Thanks much.

Gray

From: Chen, Ping (NIH/NIAID) [E]
Sent: Wed, 22 Nov 2017 07:03:29 +0000
To: Handley, Gray (NIH/NIAID) [E]
Cc: Bernabe, Gayle (NIH/NIAID) [E];Meegan, James (NIH/NIAID) [E];Rosa, William (NIH/NIAID) [E]
Subject: Re: trip report
Attachments: WIV P4 lab Summary.docx

I drafted the following report for my visit to the P4 lab as you requested. (b) (5)
(b) (5)
(b) (5)
(b) (5)
Anyway I want to get it out before the holiday starts now in the embassy (early release).
Have a nice Thanksgiving! I won't eat any turkeys but will try to find chicken in Gulangyu Island.
Ping

Ping Chen, PhD
Director of NIAID Office in China
Office of Global Research, NIAID, NIH
Bethesda Office: (b) (6)
BB: (b) (5)
Beijing Office: (b) (5)
Cell: (b) (5)
U.S. Cell: (b) (5)
U.S. Embassy Beijing
#55 An Jia Lou Road
ChaoYang District, 100600
Beijing, China
(b) (6)
(b) (6)

From: Chen, Ping (NIH/NIAID) [E]
Sent: Monday, November 6, 2017 21:24
To: Handley, Gray (NIH/NIAID) [E]
Cc: Bernabe, Gayle (NIH/NIAID) [E]; Meegan, James (NIH/NIAID) [E]; Rosa, William (NIH/NIAID) [E]
Subject: Re: trip report
OK.

Sent from my iPhone

On Nov 6, 2017, at 9:21 PM, Handley, Gray (NIH/NIAID) [E] (b) (6) wrote:

Please send us by e-mail your full report on the visit and then we can decide what to do with that information. Gray

From: Chen, Ping (NIH/NIAID) [E]
Sent: Thursday, October 26, 2017 11:28 PM

To: Handley, Gray (NIH/NIAID) [E] (b) (6)
Cc: Bernabe, Gayle (NIH/NIAID) [E] (b) (6); Meegan, James (NIH/NIAID) [E] (b) (6); Rosa, William (NIH/NIAID) [E] (b) (6)
Subject: Re: trip report

(b) (5)

Let me know what you would like me to do.
Ping

Ping Chen, PhD
Director of NIAID Office in China
Office of Global Research, NIAID, NIH
Bethesda Office: (b) (6)
BB: (b) (6)
Beijing Office: (b) (6)
Cell: (b) (6)
U.S. Cell: (b) (6)
U.S. Embassy Beijing
#55 An Jia Lou Road
ChaoYang District, 100600
Beijing, China
(b) (6)
(b) (6)

From: Handley, Gray (NIH/NIAID) [E]
Sent: Friday, October 27, 2017 1:40:04 AM
To: Chen, Ping (NIH/NIAID) [E]
Cc: Bernabe, Gayle (NIH/NIAID) [E]; Meegan, James (NIH/NIAID) [E]; Rosa, William (NIH/NIAID) [E]
Subject: RE: trip report

Thanks for this report, Ping. (b) (5)

(b) (5)

(b) (5)

Gray

From: Chen, Ping (NIH/NIAID) [E]
Sent: Thursday, October 26, 2017 5:01 AM
To: Handley, Gray (NIH/NIAID) [E] (b) (6); Bernabe, Gayle (NIH/NIAID) [E] (b) (6); Meegan, James (NIH/NIAID) [E] (b) (6); Rosa, William (NIH/NIAID) [E] (b) (6)
Subject: trip report

Hi,

This week I went to Wuhan to visit the Bio safety lab 4 in Wuhan Institute of Virology (WIV), an institute under the Chinese Academy of Sciences (CAS). My contact who helped arrange the visit is Dr. Zhengli Shi, who is a Chinese collaborator on a NIAID grant to EcoHealth for SARS like corona virus project.

(b) (5)

(b) (5)

Please let me know if you have any questions.

Thanks

Ping

Ping Chen, PhD
Director of NIAID Office in China
Office of Global Research, NIAID, NIH
Bethesda Office: (b) (6)
BB: (b) (6)
Beijing Office: (b) (6)
Cell: (b) (6)
U.S. Cell: (b) (6)
U.S. Embassy Beijing
#55 An Jia Lou Road
ChaoYang District, 100600
Beijing, China
(b) (6)
(b) (6)

From: Chen, Ping (NIH/NIAID) [E]
Sent: Wed, 15 Apr 2020 23:02:55 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: FW: 2018 cable
Attachments: 18-BEIJING-138.eml.pdf

Rick forwarded the cable. I was listed as a drafter. About half of the content was taken from my summary.

(b) (5)

Talk to you in the morning.

Ping

From: (b) (6)
Date: Wednesday, April 15, 2020 at 6:18 PM
To: "Chen, Ping (NIH/NIAID) [E]" (b) (6)
Cc: Ronald Moolenaar (b) (6)
Subject: 2018 cable

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SBU

MRN:	18 BEIJING 138
Date/DTG:	Jan 19, 2018 / 190739Z JAN 18
From:	AMEMBASSY BEIJING
Action:	WASHDC, SECSTATE *ROUTINE*
E.O.:	13526
TAGS:	SHLH, ETRD, ECON, PGOV, CN
Captions:	SENSITIVE
Reference:	17 WUHAN 48
Subject:	China Opens First Bio Safety Level 4 Laboratory

1. (SBU) **Summary and Comment:** The Chinese Academy of Sciences (CAS) has recently established what is reportedly China's first Biosafety Level 4 (BSL-4) laboratory in Wuhan. This state-of-the-art facility is designed for prevention and control research on diseases that require the highest level of biosafety and biosecurity containment. Ultimately, scientists hope the lab will contribute to the development of new antiviral drugs and vaccines, but its current productivity is limited by a shortage of the highly trained technicians and investigators required to safely operate a BSL-4 laboratory and a lack of clarity in related Chinese government policies and guidelines. (b) (5)
(b) (5)
(b) (5) **End Summary and Comment.**

China Investing in Infectious Disease Control

2. (U) Between November 2002 and July 2003, China faced an outbreak of Severe Acute Respiratory Syndrome (SARS), which, according to the World Health Organization, resulting in 8,098 cases and leading to 774 deaths reported in 37 countries. A majority of cases occurred in China, where the fatality rate was 9.6%. This incident convinced China to prioritize international cooperation for infectious disease control. An aspect of this prioritization was China's work with the Jean Merieux BSL-4 Laboratory in Lyon, France, to build China's first high containment laboratory at Wuhan's Institute of Virology (WIV), an institute under the auspices of the Chinese Academy of Sciences (CAS). Construction took 11 years and $44 million USD, and construction on the facility was completed on January 31, 2015. Following

two years of effort, which is not unusual for such facilities, the WIV lab was accredited in February 2017 by the China National Accreditation Service for Conformity Assessment. It occupies four floors and consists of over 32,000 square feet. WIV leadership now considers the lab operational and ready for research on class-four pathogens (P4), among which are the most virulent viruses that pose a high risk of aerosolized person-to-person transmission.

Unclear Guidelines on Virus Access and a Lack of Trained Talent Impede Research

3. (SBU) In addition to accreditation, the lab must also receive permission from the National Health and Family Planning Commission (NHFPC) to initiate research on specific highly contagious pathogens. According to some WIV scientists, it is unclear how NHFPC determines what viruses can or cannot be studied in the new laboratory. To date, WIV has obtained permission for research on three viruses: Ebola virus, Nipah virus, and Xinjiang hemorrhagic fever virus (a strain of Crimean Congo hemorrhagic fever found in China's Xinjiang Province). Despite this permission, however, the Chinese government has not allowed the WIV to import Ebola viruses for study in the BSL-4 lab. Therefore, WIV scientists are frustrated and have pointed out that they won't be able to conduct research project with Ebola viruses at the new BSL-4 lab despite of the permission.

(b) (6)

(b) (6) Thus, while the BSL-4 lab is ostensibly fully accredited, its utilization is limited by lack of access to specific organisms and by opaque government review and approval processes. As long as this situation continues, Beijing's commitment to prioritizing infectious disease control - on the regional and international level, especially in relation to highly pathogenic viruses, remains in doubt.

(b) (6) noted that the new lab has a serious shortage of appropriately trained technicians and investigators needed to safely operate this high-containment laboratory. University of Texas Medical Branch in Galveston (UTMB), which has one of several well-established BSL-4 labs in the United States (supported by the National Institute of Allergy and Infectious Diseases (NIAID of NIH)), has scientific collaborations with WIV, which may help alleviate this talent gap over time. Reportedly, researchers from GTMB are helping train technicians who work in the WIV BSL-4 lab. Despite this, (b) (6) they would welcome more help from U.S. and international organizations as they establish "gold standard" operating procedures and training courses for the first time in China. As China is building more BSL-4 labs, including one in Harbin Veterinary Research Institute subordinated to the Chinese Academy of Agricultural Sciences (CAAS) for veterinary research use (b) (6) the training for technicians and investigators working on dangerous pathogens will certainly be in demand.

Despite Limitations, WIV Researchers Produce SARS Discoveries

6. (SBU) The ability of WIV scientists to undertake productive research despite limitations on the use of the new BSL-4 facility is demonstrated by a recent publication on the origins of SARS. Over a five-year study, (b) (6) (and their research team) widely sampled bats in Yunnan province with funding support from NIAID/NIH, USAID, and several Chinese funding agencies. The study results were published in PLoS Pathogens online on Nov. 30, 2017 (1), and it demonstrated that a SARS-like coronaviruses isolated from horseshoe bats in a single cave contain all the building blocks of the pandemic SARS-coronavirus genome that caused the human outbreak. These results strongly suggest that the highly pathogenic SARS-coronavirus originated in this bat population. Most importantly, the researchers also showed that various SARS-like coronaviruses can interact with ACE2, the human receptor identified for SARS-coronavirus. This finding strongly suggests that SARS-like coronaviruses from bats can be transmitted to humans to cause SARS-like disease. From a public health perspective, this makes the continued surveillance of SARS-like coronaviruses in bats and study of the animal-human interface critical to future emerging coronavirus outbreak prediction and prevention. (b) (5) (b) (5) WIV scientists are allowed to study the SARS-like coronaviruses isolated from bats while they are precluded from studying human-disease causing SARS coronavirus in their new BSL-4 lab until permission for such work is granted by the NHFCP.

1. Hu B, Zeng L-P, Yang X-L, Ge X-Y, Zhang W, Li B, et al. (2017) Discovery of a rich gene pool of bat SARS-related coronaviruses provides new insights into the origin of SARS coronavirus. PLoS Pathog 13(11): e1006698. https://doi.org/10.1371/journal.ppat.1006698

Signature:	BRANSTAD
Drafted By:	(b) (6)
Cleared By:	
Approved By:	
Released By:	
Info:	CHINA POSTS COLLECTIVE *ROUTINE*
Dissemination Rule:	Archive Copy

UNCLASSIFIED
SBU

From: Chen, Ping (NIH/NIAID) [E]
Sent: Thu, 16 Apr 2020 12:17:53 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: Re: UTMB

Thanks Gray.
Her phone number is (b) (6)
I will let her know you are going to call her. I did tell her I will contact her in the morning.
Talk to you at noon.

Ping

From: "Handley, Gray (NIH/NIAID) [E]" (b) (6)
Date: Thursday, April 16, 2020 at 8:11 AM
To: "Chen, Ping (NIH/NIAID) [E]" (b) (6)
Subject: RE: UTMB

(b) (5) I will call her this morning because you are busy. I really appreciate your reach out to her and her willingness to talk to Jim at UTMB. We will talk at noon. Thanks again for engaging with this.

From: Chen, Ping (NIH/NIAID) [E] (b) (6)
Sent: Wednesday, April 15, 2020 11:54 PM
To: Handley, Gray (NIH/NIAID) [E] (b) (6)
Subject: UTMB

Gray,

Talked to Nancy Boyd this evening. She would be happy to reach out to UTMB tomorrow.

Rick sent me the following questions for UTMB. I want to bring these questions by you before I ask Nancy. Talk to you tomorrow. I have an appointment with IT to fix my password renewal problem at 8:30 and my COR training starts at 9. I will try to call you a few minute before 8 if that is OK.

In addition to the questions Rick has below, (b) (5)

(b) (5)

(b) (5)

Thanks

Ping

From: Chen, Ping (NIH/NIAID) [E]
Sent: Thu, 16 Apr 2020 14:13:32 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: Re: 2018 cable

You remember this one well because most content was taken from the visit summary I wrote. The other cable (in the first email Rick sent to me and I forwarded to you) was written after they visited the institute. Definitely that Cable was obtained by the reporter because Rick and Wuhan CG's names were in the newspaper article. I don't know if the cable based on my summary was also obtained by the press.

I visited WIV on Oct. 24, 2017. I must have shared the information within the health group in the embassy. ESTH decided to make it into a cable (that is probably you remember I wrote a cable about the visit). This cable was before Rick and Wuhan CG visited WIV. They visited WIV in early 2018.

Ping

From: "Handley, Gray (NIH/NIAID) [E]" (b) (6)
Date: Thursday, April 16, 2020 at 9:55 AM
To: "Chen, Ping (NIH/NIAID) [E]" (b) (6)
Subject: RE: 2018 cable

I recall this cable very well. How does it relate to the other cable text that you sent yesterday or the day before? g

---

From: Chen, Ping (NIH/NIAID) [E] (b) (6)
Sent: Wednesday, April 15, 2020 7:03 PM
To: Handley, Gray (NIH/NIAID) [E] (b) (6)
Subject: FW: 2018 cable

Rick forwarded the cable. I was listed as a drafter. About half of the content was taken from my summary.

(b) (5)

Talk to you in the morning.

Ping

From: (b) (6)
Date: Wednesday, April 15, 2020 at 6:18 PM
To: "Chen, Ping (NIH/NIAID) [E]" (b) (6)
Cc: Ronald Moolenaar (b) (6)
Subject: 2018 cable

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From: Boyd, Nancy (NIH/NIAID) [E]
Sent: Thu, 16 Apr 2020 16:11:22 +0000
To: Handley, Gray (NIH/NIAID) [E]
Subject: Re: Sources believe coronavirus outbreak originated in Wuhan lab as part of China's efforts to compete with US

https://science.sciencemag.org/content/362/6410

Sorry if you already got this twice before. If so, my mail did not track it.

Nancy

From: "Boyd, Nancy (NIH/NIAID) [E]" (b) (6)
Date: Thursday, April 16, 2020 at 11:57 AM
To: "Handley, Gray (NIH/NIAID) [E]" (b) (6)
Subject: Fwd: Fox: Sources believe coronavirus outbreak originated in Wuhan lab as part of China's efforts to compete with US

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From: Folkers, Greg (NIH/NIAID) [E] (b) (6)
Sent: Thursday, April 16, 2020 10:34 AM
Subject: Fox: Sources believe coronavirus outbreak originated in Wuhan lab as part of China's efforts to compete with US

Sources believe coronavirus outbreak originated in Wuhan lab as part of China's efforts to compete with US

By Bret Baier, Gregg Re | Fox News

Sources tell Fox News that the belief is now is that the coronavirus originated in a Wuhan lab, not as a bio weapon, but as China's effort to find and deal with viruses.

EXCLUSIVE: There is increasing confidence that the COVID-19 outbreak likely originated in a Wuhan laboratory, though not as a bioweapon but as part of China's attempt to demonstrate that its efforts to identify and combat viruses are equal to or greater than the capabilities of the United States, multiple sources who have been briefed on the details of early actions by China's government and seen relevant materials tell Fox News.

This may be the "costliest government cover-up of all time," one of the sources said.

The sources believe the initial transmission of the virus – a naturally occurring strain that was being studied there – was bat-to-human and that "patient zero" worked at the laboratory, then went into the population in Wuhan.

The “increasing confidence” comes from classified and open-source documents and evidence, the sources said. Fox News has requested to see the evidence directly. Sources emphasized -- as is often the case with intelligence -- that it’s not definitive and should not be characterized as such. Some inside the administration and the intelligence and epidemiological communities are more skeptical, and the investigation is continuing.

What all of the sources agree about is the extensive cover-up of data and information about COVID-19 orchestrated by the Chinese government.

Asked by Fox News' John Roberts about the reporting, President Trump remarked at Wednesday's coronavirus press briefing, "More and more we're hearing the story...we are doing a very thorough examination of this horrible situation."

Documents detail early efforts by doctors at the lab and early efforts at containment. The Wuhan wet market initially identified as a possible point of origin never sold bats, and the sources tell Fox News that blaming the wet market was an effort by China to deflect blame from the laboratory, along with the country's propaganda efforts targeting the U.S. and Italy.

U.S. Embassy officials warned in January 2018 about inadequate safety at the Wuhan Institute of Virology lab and passed on information about scientists conducting risky research on coronavirus from bats, The Washington Post reported Tuesday.

Responding to the report, Gen. Mark Milley, the chairman of the Joint Chiefs of Staff, said on Tuesday afternoon: "It should be no surprise to you that we have taken a keen interest in that and we've had a lot of intelligence take a hard look at that. I would just say at this point, it's inconclusive, although the weight of evidence seems to indicate natural, but we don't know for certain."

“Even today, I see them withholding information and I think we need to do more to continue to press them to share,” Secretary of Defense Mark Esper told “America’s Newsroom" on Wednesday, referring to China. Esper added that he wouldn't speak to "intelligence reporting," but that "most people believe it began naturally — it was organic, if you will. I think in due course, once we get through the pandemic we're in right now, there'll be time to look back and really ascertain what happened and make sure we have a better understanding so we can prevent this in the future."

Speaking to "The Story" Wednesday evening, Secretary of State Mike Pompeo remarked: "What we do know is we know that this virus originated in Wuhan, China. We know there is the Wuhan Institute of Virology just a handful of miles away from where the wet market was. There is still lots to learn. You should know that the United States government is working diligently to figure it out."

Secretary of State Mike Pompeo sits down with Martha MaCallum on 'The Story' to discuss the coronavirus pandemic and U.S.-China relations.

Concerning the State Department cables warning about the Wuhan laboratory, Pompeo said the installation "contained highly contagious materials — we knew that, we knew that they were working on this program, many countries have programs like this. In countries that are open and transparent, they have the ability to control them and keep them safe, and they allow outside observers in to make sure all the processes and procedures are right. I only wish that that had happened in this place."

On Thursday, China's foreign ministry pushed back on the suspicion that the virus escaped from the facility, by citing statements from the World Health Organization that there is no evidence the coronavirus came from a laboratory.

Americans were originally helping train the Chinese in a program called PREVENT well before the Chinese started working on this virus. The French government helped the Chinese set up the Wuhan lab.

China "100 percent" suppressed data and changed data, the sources tell Fox News. Samples were destroyed, contaminated areas scrubbed, some early reports erased, and academic articles stifled.

There were doctors and journalists who were "disappeared" warning of the spread of the virus and its contagious nature and human to human transmission. China moved quickly to shut down travel domestically from Wuhan to the rest of China, but did not stop international flights from Wuhan. Additionally, the sources tell Fox News the World Health Organization (WHO) was complicit from the beginning in helping China cover its tracks.

Trump announced at the White House coronavirus news briefing in the Rose Garden on Tuesday that the United States will immediately halt all funding for the WHO, saying it had put "political correctness over lifesaving measures." The United States is the WHO's largest single donor, and the State Department had previously planned to provide the agency $893 million in the current two-year funding period.

Senior administrations separately tell Fox News the rollout of the president's "blueprint for reopening the U.S. economy" will happen Thursday afternoon, first for governors and then briefed to the press.

Meanwhile, Trump's own handling of the crisis has come into focus. On January 24, for example, Trump tweeted in praise of China's "transparency" on coronavirus.

Though they were not speaking for the president, the sources ventured an explanation, saying it was diplomatic talk to make the Chinese "feel good". while the investigation was ongoing, with trade and other talks happening simultaneously.

In the six days after top Chinese officials secretly determined they likely were facing a pandemic from a new coronavirus, the city of Wuhan at the epicenter of the disease hosted a mass banquet for tens of thousands of people; millions began traveling through for Lunar New Year celebrations.

President Xi Jinping warned the public on the seventh day, Jan. 20. But by that time, more than 3,000 people had been infected during almost a week of public silence, according to internal documents obtained by The Associated Press and expert estimates based on retrospective infection data.

"This is tremendous," said Zuo-Feng Zhang, an epidemiologist at the University of California, Los Angeles. "If they took action six days earlier, there would have been much fewer patients and medical facilities would have been sufficient. We might have avoided the collapse of Wuhan's medical system."

Fox News' Barnini Chakraborty and The Associated Press contributed to this report.

Bret Baier is the chief political anchor of Fox News Channel, and the anchor and executive editor of "Special Report with Bret Baier." He is the author of "Three Days in January: Dwight Eisenhower's Final Mission," and "Three Days in Moscow: Ronald Reagan and the Fall of the Soviet Empire." His third presidential book, "Three Days at the Brink: FDR's Daring Gamble to win World War II," will be released on Oct. 22, 2019.